THE CHEMIST AND DRUGGIST

TELEPHONE 1852 NUMBER

TELEGRAPHIC ADDRESS CHEMICUS LONDON.

CHIEF OFFICE, LONDON: CANNON STREET, E.C.

BRANCH OFFICE, AUSTRALASIA: NORMANBY CHAMBERS, MELBOURNE.

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ALLEN & HANBURYS,

Manufacturers of Cod Liver Oil, Malt Extract, and Pharmaceutical Preparations,

Also of MEDICATED and other LOZENGES and IMPROVED JUJUBES,

WHOLESALE & EXPORT DRUGGISTS,

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(PURE).

THE NEW HYPNOTIC.

Melting Point, 125 5 C.

Sulphonal as an hypnotic is considered equal to Chloral or Morphia, without the disadvantages of deleterious effects. It has been used in over 500 cases in the principal hospitals of Germany with great success. The adult dose is from 20 to 30 grains, which is most conveniently administered in the form of tabloids, which contain 5 grains each, and are easily swallowed with a little water.

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Sulphonal, 6/11¾ per ounce, bottles included, less 10 per cent. monthly account.

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EXCHANGE COLUMN. PAGE 16.
ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS. PAGES 25–27.

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Medals—1851, 1855, 1862, 1867, 1885.

(W. G. BAKER. R. C. HEATH. T. TYRER. W. E. B. BLENKINSOP.)

WHOLESALE AND EXPORT ONLY.

MERCURIALS.

BENZOIC ACID AND BENZOATES.

BISMUTH SALTS.

FRUIT ESSENCES AND FLAVOURS.

PURE **ETHERS** METHYLATED.

FINE AND GENERAL CHEMICALS.

TABLET CAMPHOR

SUBLIMED ANY SIZE

UNIFORMLY THICK & TRANSPARENT.

SULPHONAL-BAYER. *(See page 32.)*

STEVENSON AND HOWELL

FELLOWS OF THE CHEMICAL SOCIETY &c.&c.

MANUFACTURING CHEMISTS
DISTILLERS
AND IMPORTERS OF

ESSENTIAL OILS
OF
GUARANTEED PURITY

PURE CONCENTRATED
SOLUBLE ESSENCES

FRUIT-ESSENCES

SELECTED
OIL OF LEMON
GUARANTEED
ABSOLUTELY PURE.

SOLUBLE ESSENCE
OF
LEMON,
SWEET ORANGE,
BELFAST GINGER ALE,
TANGERINE
FRUIT
CHAMPAGNES,
&c. &c.

AMERICAN
FOAM SYRUP,
FOR GIVING A CLOSE
CREAMY HEAD TO
ALL BEVERAGES.

ALL MATERIALS
REQUIRED BY
CONFECTIONERS
BISCUIT MAKERS
WHOLESALE
TOBACCONISTS,
SOAP MAKERS,
PERFUMERS,
&c &c

TRIPLE QUALITY
SOLUBLE ESSENCE
OF
JAMAICA
GINGER
A PERFECT
GINGER ESSENCE
See The Lancet, July 3rd 1888.

HIGHLY
CONCENTRATED
FRUIT
ESSENCES

HARMLESS
VEGETABLE
COLOURS
FREE FROM ANILINES

SOLUBLE
CONCENTRATED
COLOURINGS
FOR ALL LIQUIDS.

ALL MATERIALS
REQUIRED BY
MINERAL WATER
MAKERS
CORDIAL MAKERS,
RECTIFIERS & DISTILLERS
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PURE COLOURINGS
OF EVERY DESCRIPTION
ANALYTICAL AND CONSULTING CHEMISTS
STANDARD WORKS,
95A SOUTHWARK ST., LONDON. S.E.
AND 128, HOPE ST., GLASGOW.

"PREMIER BRAND"

ESSENTIAL OILS

Concentrated Fruit Essences—Soluble

MANUFACTURED BY

JOHN CUMMOCK

Who has received Hundreds of Unsolicited Testimonials, also THREE GOLD MEDALS, besides other Honours.

Chemists manufacturing their own Aërated Drinks should write for Prices and Samples of the following:—

ESSENCE "SPARKLING LIMETTA"—Soluble "Essence of Lemon"
ESSENCE "LEMON SQUASH"—Essence for Sherbet
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AND COMPARE WITH OTHER MAKERS.

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LATE 32 MAIN STREET.

KINMOND'S
Royal Leamington
APNEUMATIC

TABLE WATERS

Were first supplied to H.M. the Queen in 1856, and to H.R.H. the Prince of Wales in 1862.

KINMOND'S

GINGER ALE,

AND ALL THEIR OTHER WATERS,
Are UNRIVALLED for PURITY and QUALITY.

In Ordinary Bottles and Syphons.

MANUFACTORY—

LEAMINGTON.

TEMPERANCE BEVERAGES.

A Sixpenny Bottle of

ADAMS'S EXTRACT OF HERBS

Will make 8 gallons of sparkling, wholesome, and refreshing

PRIME HERB OR BOTANIC BEER,

Unequalled in strength and richness of flavour by any preparation made from fresh herbs.

The Extract is very carefully manufactured, on the most improved scientific principles, from the herbs and plants gathered and dried at the proper season, when their virtues are in full vigour, thus retaining their invigorating and health-giving properties.

It makes an excellent beverage, giving natural flavour and colour, and a sparkling foam like bottled ale.

In Bottles, 6d. to make 8 gals.; 1s. to make 18 gals.; and 2s. 6d. to make 50 gals.

ADAMS'S GINGER ALE ESSENCE

makes a sparkling, refreshing, and invigorating beverage for summer and winter.

ADAMS'S SPARKLING FOAM PRODUCER.

One tablespoonful added to 2 gallons of the Herb Beer or Ginger Ale, just before bottling, gives a creamy foam like bottled ale.

Wholesale Agents,
W. EDWARDS & SONS, Queen Victoria St., London.

Specially favourable terms to large Buyers from the PROPRIETOR,

B. ADAMS, Mansfield, Notts.

TO AERATED WATER MANUFACTURERS.

HAY'S SOLUBLE ✣ ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET.

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HAY'S

HOP ALE ESSENCE.

"Supplies an excellent stomachic, appetising, and agreeable summer drink."
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"For this Essence a brilliant future may be anticipated. It possesses characteristics very seldom to be met with."
Mineral Water Trade Review.

HAY'S HOP ALE.

"This is an excellent Non-Alcoholic beverage."
The Lancet.

"Evolves a delicious aroma of HOPS."—*Medical Press.*

TRADE MARK

REGISTERED.

GINGER CHAMPAGNE.

(Made from Hay's Essence.)

"An excellent and most agreeable beverage."
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The Chemist and Druggist.

GINGER ALE.

(Made from Hay's Fortified Essence.)

"It ponrs out with as fine a 'head' as any glass of ale, and possesses all the fine aromatic lavour of the pure ginger."
The Chemist and Druggist.

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER.

A Pure Essence of the Finest Ginger. **Trade Price, 5s. per lb.; 12 lbs. and upwards, 4s. 6d.**

HAY'S COMPOUND FORTIFIED ESSENCE OF JAMAICA GINGER. FOR FIRST QUALITY GINGER ALE.

Imparts an exquisite **Ginger Aroma. Trade Price, 5s. 6d. per lb.; 12 lbs. and upwards, 5s.** Quantity reqnired, five fluid ozs. to each gallon of Syrup, making 106 10-oz. bottles.

HAY'S GINGER ALE EXTRACT. FOR SECOND QUALITY GINGER ALE.

Imparts **Pungency, Colouring,** great **Brilliancy,** and an unusually **Fine Ginger Flavour and Aroma. Trade Price, 4s. 6d. per lb.; 12 lbs. and upwards, 4s.** Quantity required, three fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER ALE ESSENCE. Highly Concentrated. FOR THIRD QUALITY GINGER ALE.

This Essence makes a Ginger Ale that is unsurpassed by the so-called finest Belfast. **Trade Price, 9s. per lb.; 12 lbs. and upwards, 8s. 6d.** Quantity required, half a fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER CHAMPAGNE ESSENCE.

This Essence is a combination of the **finest flavours,** and imparts with the Ginger a **most exquisite aroma. Trade Price, 8s. per lb.; 12 lbs. and upwards, 7s. 6d.**

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.

No. 1. Highly Concentrated. Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s. Quantity required, three-quarters fluid ounce to each gallon of Syrup, making 106 10-oz. bottles.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.

No. 2. A magnificent preparation. Makes an exquisitely fine Lemonade. **Trade Price, 6s. 6d. per lb.; 12 lbs. and upwards, 6s.** Quantity required, one fluid ounce to each gallon of Syrup, making 106 10-oz. bottles.

HAY'S LEMON FLAVOUR.

No. 1. An Exceptionally Fine Essence, makes a delicious Lemonade, to which it imparts all the **Fine Aroma and Flavour** of the choicest Lemons. **Trade Price, 5s. per lb.; 12 lbs. and upwards, 4s. 6d.** Quantity required, one fluid ounce to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S LEMON FLAVOUR.

No. 2. A very fine Essence, prepared from the fresh fruit. **Trade Price, 4s. 6d. per lb.; 12 lbs. and upwards, 4s.** Quantity required, one-and-a-quarter fluid ounce to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S HOP ALE ESSENCE.

This Essence is made from the **Choicest Hops grown,** and is unrivalled for its peculiarly fine **Hop flavour** and aroma. **Hop Ale** made from this Essence has the full flavour of the **finest Hops,** and is a really **appetising Bitter Beer. Trade price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s.** Quantity required, two fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

For Orange, Vanilla, and all other Essences send for Price List. [2]

W. HAY. Manufacturing Chemist, Beverley Rd., ENGLAND. HULL.

The difference between preparations made from HAY'S ESSENCES and those made from the numerous SPURIOUS IMITATIONS of them bearing the name of SOLUBLE ESSENCES is most marked, and no manufacturer using the latter can compete with one using HAY'S PREPARATIONS, as is universally known.

Indentors, to prevent disappointment, should specify that the Goods are to be of HAY'S MANUFACTURE.

W. J. BUSH & CO.'S

ENGLISH DRAWN ESSENTIAL OILS.

Always Uniform and of Exceptionally Fine Quality.

THE ONLY MAKERS OF EVERY KIND OF ENGLISH DRAWN ESSENTIAL OILS.

CONCENTRATED FRUIT ESSENCES.

Five or Six times the Strength of, and Vastly Superior to all others.

SOLUBLE ESSENCES.

Much Stronger and Infinitely Superior in Flavour to all Imitations, consequently cheaper in use.

SOLUBLE ESSENCE OF JAMAICA GINGER

THE FINEST, STRONGEST, AND CHEAPEST IN THE TRADE.

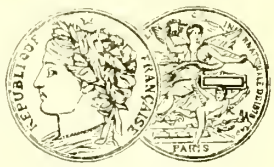
SOLUBLE ESS. LEMON

ESS. BELFAST GINGER ALE.

Exposition Universal, Paris, 1878.

FRENCH CREAM

GUM EXTRACT.



PROTECTED BY ROYAL *MEDAILLE D'ARGENT.* **LETTERS PATENT.**

For producing a permanent head of creamy richness upon all kinds of Syrups, Mineral Waters, Cyders, Beers, Ales, Wines, and all other liquids or beverages where a frothy foam or head is required. [2]

PROCEEDINGS WILL BE TAKEN AGAINST ANY INFRINGEMENT OF THIS PATENT.

ARTILLERY LANE, BISHOPSGATE STREET, LONDON.

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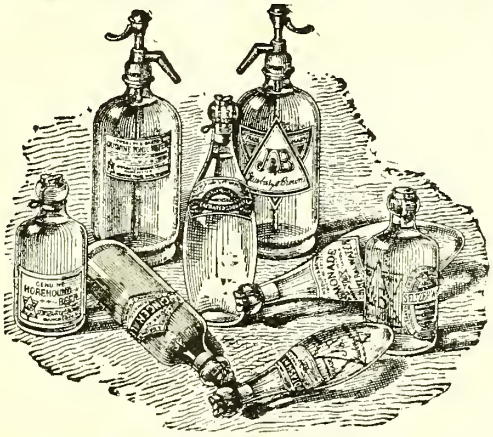
(MANCHESTER)

SPARKLING TABLE WATERS,

UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.
SELTZER WATER.
POTASH WATER.
LITHIA WATER.
SIMPLE AËRATED WATER.



LEMONADE.
GINGER ALE.
QUININE TONIC.
GINGER BEER.
HOREHOUND BEER.

EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."
FRANCIS JONES, F.R.S.E., F.C.S.

"On the whole, I have no hesitation in stating that your Aërated Waters are of the highest standard of purity which is practically attainable."
LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but *Citric Acid*.

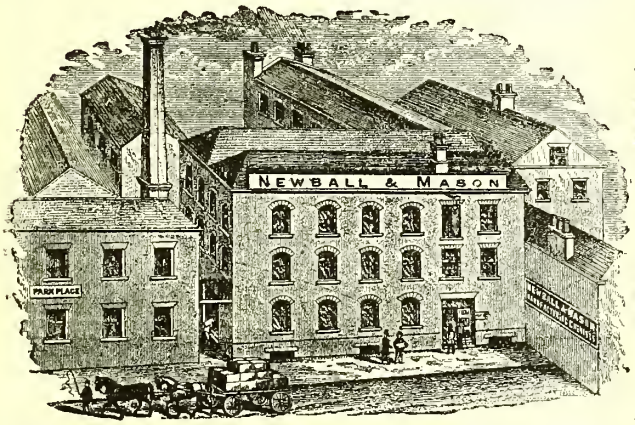
"I took a sample of the water used in your manufactory, in the preparation of the Aërated Waters, and found it, as was the case with the completed compounds, entirely *free* from lead, copper, *or any injurious* matter whatever."
C. ESTCOURT, F.C.S., F.C.I.

J. & B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination.

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

NON-INTOXICATING BEER

PRODUCED AT A SMALL COST AND LITTLE TROUBLE.
ONE TABLESPOONFUL MAKES A GALLON.



BEWARE OF MEAN & FRAUDULENT IMITATIONS.
BEWARE OF OTHERS COPYING our Handbills and Labels.
BEWARE OF CHEAP FOREIGN PRODUCE.

MASON'S IS A SPECIAL COMPOUND AND THE ORIGINAL PREPARATION.

ALL OTHERS ARE IMITATIONS.

MASON'S ORIGINAL

EXTRACT OR ESSENCE OF HERBS

(REGISTERED).

Composed of Yarrow, Dandelion, Comfrey, & Horehound.

FOR THE SPEEDY PRODUCTION OF

HERB OR BOTANIC BEER.

This invaluable preparation is carefully compounded from the above well-known Herbs. Notwithstanding so many imitations got up to resemble the original, it stands unrivalled for the production of a most delicious, wholesome, and non-intoxicating beverage, full of body and flavour, and a rich creamy head like bottled ale.

INVENTORS AND MANUFACTURERS—

NEWBALL & MASON, Chemists,
Park Place, NOTTINGHAM.

WHOLESALE AGENTS.—LONDON—Sanger & Sons, Lynch & Co., Barclay & Sons, Edwards & Sons, Newbery & Sons, Hovenden & Son, Sutton & Co. LIVERPOOL—Evans, Sons & Co.; Jno. Thompson. LEEDS—Goodall, Backhouse & Co.

COLONIAL AGENTS WANTED.

Sold in Bottles, 6d., 1s., 2s., 5s., and 20s. each. Prices, Circulars, Show Cards, &c., on application.
Is not Affected by Climate or Weather.

The Chemists' Aërated & Mineral Waters Association, Limited

London · Harrogate · Bristol

THE CHEMIST'S TRUE FRIEND.

Established in 1878 to supply Chemists ONLY with the Highest Quality of Aërated Waters at the Lowest Co-operative Prices.

Received with doubt, it worked its way uphill to success, and now fills more Syphons than any Maker in the United Kingdom.

Number of Members, about 1,800. Last Dividend, 7½ per cent.

SECURE A SHARE WITHOUT DELAY.

Write—Secretary, 45 Gifford St., Caledonian Road, London, N., for Samples, Prices, &c.

PRIZE MEDAL

HEALTH EXHIBITION.

ESTABLISHED 1812.

POTTER & CLARKE,

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WHOLESALE AND EXPORT BOTANIC DRUGGISTS,

75 WESTON STREET, LONDON, S.E.

SPECIALITIES—

POTTER'S HERB BEER EXTRACT

For the production of a splendid Botanic Beer, with a good colour, flavour, and body, and a creamy head like bottled ale. The demand for this article last year was exceedingly large, and **the demand this year bids fair to be still larger.** All Chemists will find it a profitable article of sale.

Price 10d. per lb. Special quotations for quantity. In 6d. Bottles, 3/6 per dozen.

Supplies of printed matter sent with all 6d. Bottles. Will keep good in any climate.

FLUID EXTRACTS. NEW REMEDIES.

MEDICINAL HERBS IN PACKETS.

Special Agents for Messrs. Parke, Davis & Co.'s Fluid Extracts, Concentrations, Pressed Herbs, &c.

Price Lists on application. Telegraphic Address—"HOREHOUND, LONDON."

FOREIGN INDENTS RECEIVE OUR SPECIAL ATTENTION.

TELEPHONE No. 7522. TELEGRAPHIC ADDRESS—"IDRIS KENTISH TOWN."

IDRIS & CO.

Pure Mineral Water Manufacturers,

ASCHAM STREET, LONDON, N.W.

IDRIS & CO. are at all times prepared to offer the same terms, and *greater advantages* than, any of the so-called Co-operative Associations. Their Mineral Waters are now supplied to a much greater extent and *more exclusively* to Chemists and Hospitals than those of any other Mineral Water firm or Association in London.

Being Chemists, they are practically acquainted with the requirements of the trade, and give their *personal attention* to every detail connected with their business.

Write for terms and compare prices, INCLUDING delivery.

PURE LIME JUICE

("IDRIS" BRAND).

THIS Juice is the first CLEAR pressings of SELECTED FRUIT in specially-designed wooden presses, prepared according to our instructions, at the "Wall House Estate," Dominica, B.W.I., and will be found of a delicious fruity flavour, without the slightest mustiness or bitterness, and fully 25 per cent. stronger in Citric Acid than the usual brands of Lime Juice.

Samples sent free, with quotations for quantities and regular supplies.

IDRIS & COMPANY,

Sole Importers and Agents,

ASCHAM STREET, LONDON, N.W.

HAYWARD TYLER & CO.

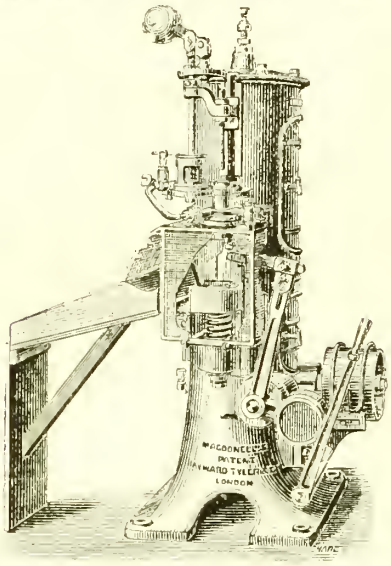
SOLE MAKERS OF THE

MACDONELL STEAM BOTTLER.

Syrups, Fills, and Corks up to

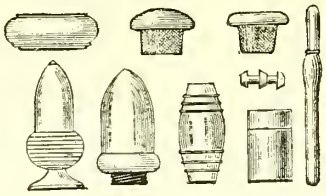
180 DOZEN PER HOUR.

THREE GOLD MEDALS.



[2]

84, 85 WHITECROSS STREET, LONDON



IRVIN & SELLERS
WOOD TURNERS,
PRESTON.

By Special Appointment to
H.R.H. the Duke of Connaught and the Royal Famil

BOURNE WATERS.

THE PUREST IN ENGLAND.

R. M. MILLS & CO.,

BOURNE, LINCOLNSHIRE,

MANUFACTURERS OF

SODA, POTASH, LITHIA, AND SELTZER WATERS
LEMONADE, AND AROMATIC GINGER ALE.

4-dozen and 6-dozen Cases Carriage Paid

Prices and Pamphlet on application. Agents appointed.

Messrs. INGRAM & ROYLE, 52 Farringdon Street, Wholesale Agent for the sale of our Waters.

Syphons & Apparatus with all the latest improvements for the Manufacture of Aërated Water

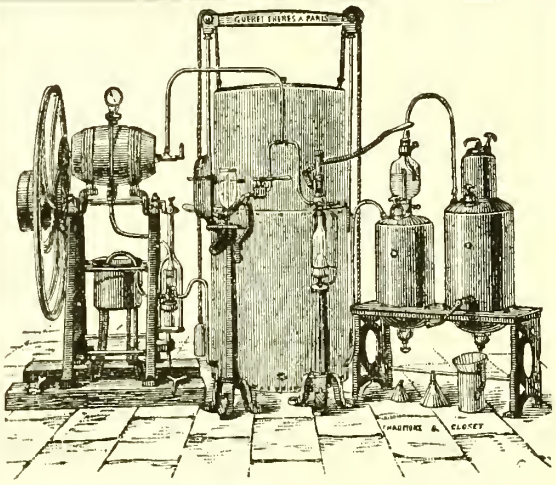
GUÉRET FRÈRES,

MACHINISTS AND PATENTEES IN FRANCE AND ABROAD

PARIS—72 BOULEVARD DE LA GARE, 72—PARIS.

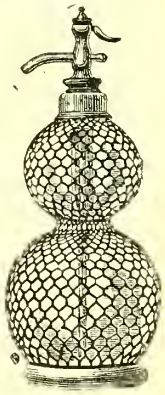
GOLD MEDAL,
AMSTERDAM, 1883.

SYPHONS WITH SHORT LEVER,
With metal tops of pure tin, carefully mounted, and the glass of the first quality.



"CONTINUOUS PROCESS" Apparatus, complete, with BRONZE SATURATOR (spherical or barrel-shaped). Guaranteed without flaw in construction, possessing perfect action, and tested to a high pressure, while fulfilling every desirable condition of economy and sanitation.

DIPLOMA OF HONOUR
PARIS, 1887.



GAZOSELTZ,
For the instantaneous production Aërated Beverages at table. Any one can use them.

FULL PARTICULARS AND GENERAL CATALOGUE SENT ON APPLICATION.

THE BEST NATURAL APERIENT.

Persistent attempts are made by interested parties to deceive the public by offering Natural Mineral Aperient Waters with arks, names, and designations very similar to those which are used by the **APOLLINARIS COMPANY LIMITED**) upon the **NATURAL MINERAL APERIENT WATERS** imported by them.

Under these circumstances the **APOLLINARIS COMPANY (LIMITED)** feel compelled to caution the public at the **HUNGARIAN BITTER WATER** sold by the **COMPANY** always bears the name of the **POLLINARIS COMPANY (LIMITED)** on the Label, and a **RED DIAMOND**, which is their **TRADE ARK** of Selection.

DEMAND THE DIAMOND MARK,

d insist upon receiving the **HUNGARIAN APERIENT WATER** of the **APOLLINARIS COMPANY (LIMITED)**.

FAVARGER'S SYPHONS

ARE THE

BEST IN THE MARKET.

HEADS PURE TIN,

AND

GUARANTEED FREE FROM LEAD.

GLASS,

FINEST ANNEALED.

SYPHONS.

READ the following:—

"Edinburgh.

"We beg to say that we have used your "Syphons for many years, and are very well "pleased with them. We have tried other makers "but always found yours superior. We think your "Syphons the best of any we have seen.

"We are, yours truly, H. C. BAILDON & SON."

"Bournemouth.

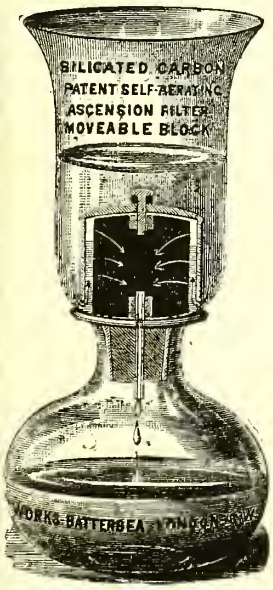
"We cannot, we think, do better than tell you that of the Syphons "supplied us by you, and used by us during three successive seasons, we have not "had one out of order—if we except two with broken tubes; and only one burst, "and that on first time of filling. The Plating is, we consider, of special excellence, "and wears well. We shall not need to look farther whilst you continue to supply us with what "we consider the best value in the market.—Yours truly, J. M. DOWDEN & CO."

FOR PRICES, FULL PARTICULARS, AND TESTIMONIALS, APPLY TO

FAVARGER & CO., 76 TURNMILL STREET, E.C., LONDON

FLATNESS OF TASTE

SO COMMON IN FILTERED WATER,



Glass Table Filters.

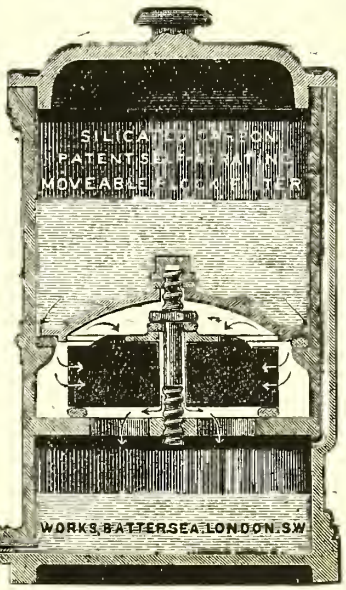
OBVIATED

BY USING

SILICATED CARBON FILTERS AERATED

By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable."

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.



Domestic Filters.

LIBERAL DISCOUNT TO THE TRADE.

FOR PRICES AND FULL PARTICULARS, WRITE TO THE

SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.

11

CAUTION.

TO CHEMISTS AND DRUGGISTS, AND OTHERS.

Many of our customers, especially those abroad, having complained that when ARTICLES OF OUR MANUFACTURE have been ordered through Merchants and Wholesale Houses, other and inferior goods have been substituted, we beg to inform the Trade that to insure the supply of OUR MANUFACTURES in future all our BEST QUALITY GOODS will bear Trade Mark as annexed.

S. MAW, SON & THOMPSON.

ALDERSGATE STREET, LONDON.

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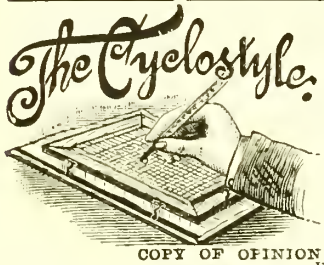

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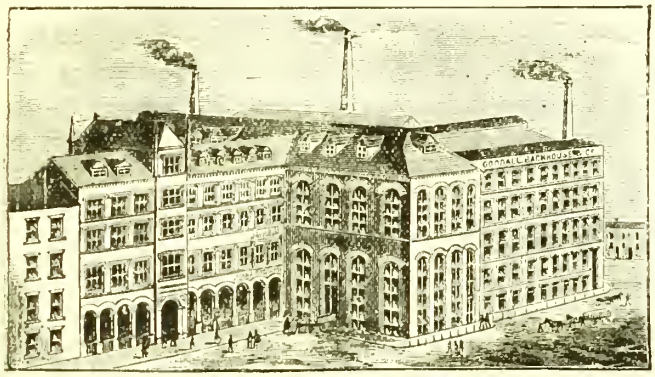

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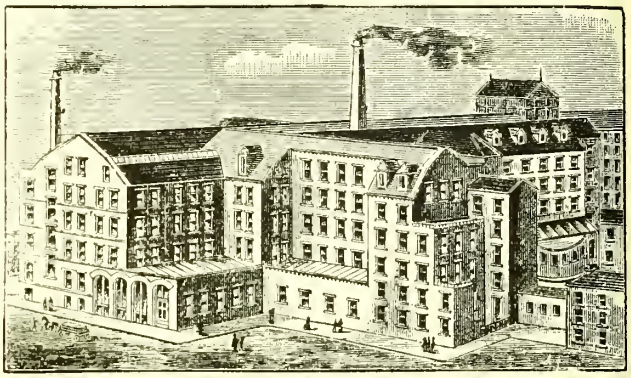

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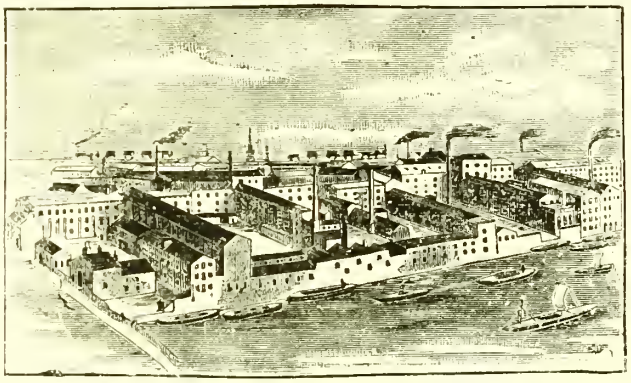

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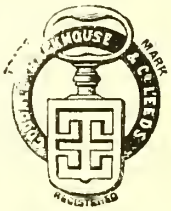

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FOR PAINTING STOVES, GRATES, IRON, TIN, &c.
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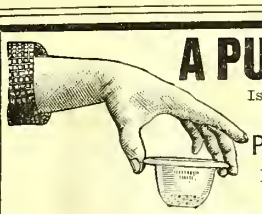

A PURE CUP OF TEA

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Patent Antitannic Infuser.

Better Flavour and Less Tea used than with the teapot.

READ OUR PAMPHLET. } GRATIS and POST FREE.

For Single Cups of Tea HOBBS' INFUSER is unequalled. Its cost is soon repaid by the saving in the quantity of tea used. Price 1s. 6d. from all China Dealers, Grocers, Chemists, &c., or post free direct, 1s. 9d.

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WALKER & DALRYMPLE'S
BROKEN-LEAF TEA, 1s. 8d. per lb.
A MONEY SAVING TEA. ABSOLUTELY PURE.
The small leaf from some of the finest India and China Teas. Produces a Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

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INTERMEDIATE TEA, 2s. per lb.
BEST at the PRICE EVER SOLD. Great strength and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed, where unrepresented, throughout the United Kingdom.

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Prospectus and Samples Free on Application.
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AND

"BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.
LARGEST IN THE TRADE.
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"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE, OR READING SAUCE.

1d. Sample Bottles, dozen parcels	..	..	per gross	5/	extra quality 6/
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¼-Bottles (flat or round), reputed ½-pint		..	"	16/	" 24/
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½-pint Imperial Round Stoppered Bottles		..	"	30/	" 36/
1-pint Imperial " "		..	"	50/	" 60/
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ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.
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In original Boxes, Half Chests, or Chests, as imported.

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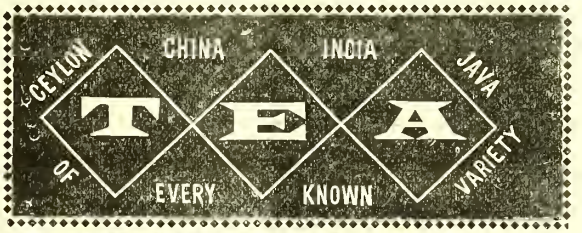

Or in Leaden or Foil Packets (¼-lb., ½-lb., 1-lb., &c.),

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Fancy Tin Boxes any size or weight.

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In Boxes, 20 lbs. or 40 lbs.; ½-Chests, 60 lbs.; or Chests, 100 lbs. 60 lbs. carriage paid to any Station in England or Wales. *Terms—Net Cash with order.*

CEYLON TEAS (PURE)—IN LEAD PACKAGES (¼-lb., ½-lb., or 1-lb.) *Most attractively labelled.*

Culloden	Grange	Sheen	Orwell	Mooloya	Pen-y-lan	St. Ley's
1/4	1/6	1/8	1/10	2/2	2/6	2/9

Duty-paid Prices. (For Export under Bond, 6d. per lb. less.)

Export Department.—Teas or Coffees in Bond. Shipped to any part of the world. Terms, f.o.b. London; against banker's credit or remittance.
Samples, Price Current, and every information on application.

RAW COFFEES (Duty 14s. cwt.).
Rio, Santos, Costa Rica, Mocha, East India, Mysore, Naidoobatum, Jamaica, Porto Rico, Ceylon, Guatemala, Manila, Java, &c.

AT MARKET PRICES.

ROASTED COFFEES (Duty Paid).
10½d., 1/, 1/1, 1/2, 1/3, 1/4; Mocha, 1/5.
In Bags, 28 lbs., 56 lbs., or 112 lbs. net. *Bags free*
Also supplied Ground in 7-lb., 14-lb., 28-lb., or 56-lb. tins.

THE NEW FRENCH COFFEE—**CAFE FRANCAIS** to sell at 10d., 1/, 1/4, and 1/6, in ¼-lb., ½-lb., and 1-lb. Canisters. *Most tastefully labelled, without any firm's name appearing.*

MITRE TEA.

COMFORT & PROLONG YOUR EXISTENCE

BY DRINKING

MITRE TEA.

	s.	d.
Mitre "Broken Leaf"	1	4
Mitre "Broken Am. Pekoe"	1	8
Mitre "Thrift" (whole leaf)	1	8
Mitre "Kee-Mun"...	2	0
Mitre "Amgoorie"...	2	6

Fac-Simile of Show Card distributed Gratis to all Agents.

MITRE TEA.

	s.	d.
Mitre "Broken Leaf"	1	4
Mitre "Broken Am. Pekoe"	1	8
Mitre "Thrift" (whole leaf)	1	8
Mitre "Kee-Mun"...	2	0
Mitre "Amgoorie"...	2	6

Sold by Specially Selected Agents. Wrapped in $\frac{1}{4}$-lb., $\frac{1}{2}$-lb., & 1-lb. Parcels.

VALUABLE AGENCY.

Framed Show Cards, Enamelled Iron Tablets, Posters, Window Transfer, and Handbills with Agent's Name on supplied free. Newspaper and Railway Station Advertisements to suit the requirements of Agents. Applications for Agencies where unrepresented will receive prompt attention. Price Current and Pamphlet, with Terms, post free.

KEARLEY & TONGE, MITRE SQUARE, ALDGATE, **LONDON, E.C.**

SPRING BLOSSOM CEYLON TEA.

AGENTS WANTED WHERE NOT REPRESENTED.

FRAGRANT AS THE FLOWERS OF SPRING:

Packed in New Patent Air-tight Circular Boxes. Most Novel and Attractive Package.

In ¼-lb., ½-lb., and 1-lb. Boxes, to sell Retail at 2/-, 2/6, and 3/- per lb. Set of three ¼-lb. samples post free for 2/- in stamps

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What is this Tea Agency?

Seems to be money in it.

I'll send sample order, anyway.

By George, this Tea is right!

Heavens, how it sells!

All gone! Must wire at once for more.

REGISTERED.

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Are prepared to entertain a limited number of applications from Traders of undoubted standing to be appointed Agents for the sale of the Company's Teas. A Liberal Commission will be allowed. The Agency will be found to be a valuable one, entailing little, if any, trouble to the Agent, in addition to which it will be the means of bringing numerous customers to him, who will patronise his general business.

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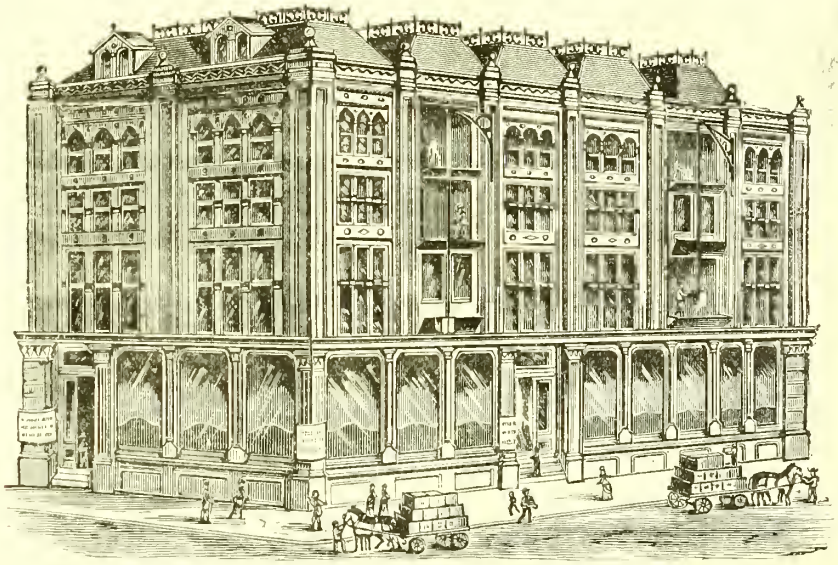
THE PREMIER TEA OF INDIA AND CEYLON, IS THEIR SPECIAL IMPORTATION AND THE PERFECTION OF TEA.

REGISTERED **"TAPRABUNDA"** TRADE MARK.



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In Lead Packets, ¼ lb., ½ lb., and 1 lb.

Terms of Agency, and Samples of the Tea, on application.

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56 Wilson Street, and 1 & 3 Earl Street, Finsbury,

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VALUABLE & INTERESTING TO EVERYBODY.

COMPRESSED HOPS.

Best Hops compressed into small parcels of one pound and half-pounds, and sent out in cases containing 30 lbs. each. These Hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

They are introduced to the Public to enable them to make their own BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given on each packet.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

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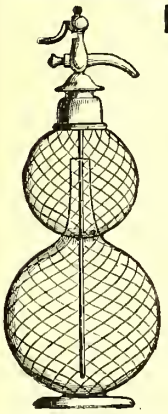
Sole Agents for Chemists—EVANS, SONS & CO., Liverpool; EVANS, LESCHER & WEBB, London; EVANS, SONS & MASON, Lim., Montreal.



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Caned, each	7/	8/	12/5	20/9
Wired, each	6/6	7/9	11/9	18/11

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REDUCED PRICES, SUBJECT TO CASH DISCOUNT.

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Pilules	5/-	3/-	per dozen.
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HOMŒOPATHIC CHEMISTS
(FIRST ESTABLISHED),
48, THREADNEEDLE ST., LONDON.

CORKS FOR CHEMISTS & DRUGGISTS

WE CAN OFFER A SPECIAL VALUE IN

Long Dispensing Corks, Long Vials and Short Vials of all kinds,

including extra qualities especially prepared for Homœopathic Chemists.

Having secured a very large quantity of

CHEAP GINGER BEER CORKS

this year, we can offer a good line to buyers of these Corks.

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MANUFACTURERS OF HIGH-CLASS LOZENGES OF EVERY DESCRIPTION,

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Kills Ticks, Lice, &c., Cures Scab, and Prevents Maggot Fly Striking.

MIXES INSTANTLY WITH COLD WATER.

COSTS ABOUT A HALFPENNY PER SHEEP.

This preparation has been thoroughly tested both at home and in the Colonies, and has proved highly satisfactory. It does not leave any sediment when mixing, and is perfectly safe in use. In attractive yellow packets; neither the Powder or wrapper is affected by age, and there is no fear of the packet bursting. In various sizes.

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FREE FROM POISON.

EFFECTUALLY KEEPS OFF THE MAGGOT FLY.

In Packets, 6d., for 12 to 15 Sheep.
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MANUFACTURING CHEMISTS,

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Jewsbury and Brown
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[See SYPHONS and ESSENCES.]
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Elste & Co.
Robinson and Sons

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Robinson, G. H.
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Potts
Toogood

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Maw, Son and Thompson

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Squire and Sons
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Sanger and Son
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Greeff and Co.
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Morris, Callard, and Co.
Oscar Andreae and Co.
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Smith, T. and H., and Co.
Typke and King
White, A., and Sons
Zimmermann, A. and M.

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Dunn and Co.
Levermore, Ang. and Co.
White, A., and Sons

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Wood, V.

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Towle, A. F.

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Evans, Sons and Co.
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Lorimer and Co.
Smith, T. J.
Woolley, Sons and Co
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Sanger and Son
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Lorimer and Co.
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Nascio, Aveline and Co.
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Robbins
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Kimmond and Co.
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Hearon, Squire and Francis
Hill, A. S., and Son
Wright, Layman and Umney

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GUTTAPERCHA
Duncan, Flockhart

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Brodie, J. (Imperial Hair Dye)
Capper, W. B. (Crinidine)
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Leath and Ross
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Duncan, Flockhart

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Tyrer, P.

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Maw, Son and Thompson
Toogood, W.

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Steiner and Co.

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Ewen, J.

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LEECHES
Fitch and Nottingham
Potter and Clarke

LIME JUICE
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Kernick and Son

LINSEED
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Mumford, G. S.

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Maw, Son and Thompson
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Seabury and Johnson

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Dinneford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
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Kuhn, B.

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Zimmermann, A. and M.

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Munday, J. (Injection Day)
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Durrant, Gen.
Ewen (Soaps)
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Newbery and Sons
Pear's Soap (Dirty Boy)
Royal Perfumery Co.
Sainsbury, S. (Law Water)
Stern, G. and G. (Pumiline)
Treatt, R. C.
Warrick Brothers
West, T. (Okell's Mons)
Woolley, Sons and Co. (Powder

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PEPSINE, &c.
Burroughs, Wellcome and Co.
Fletcher, Fletcher & Stevenson
Greeff, R. W. and Co.
Newbery (Inglavin)
Warner and Co. (Inglavin)
Zimmermann

PEROX. OF HYDR.
Dunn and Co
Robbins and Co.

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Allen and Hanburys
Barron, Squire and Co.
Benger's
Burgoyne, Burbidges
Burroughs, Wellcome (Various)
Duncan, Flockhart
Ferris and Co.
Fletcher (Lqrs. for Syrups)
Greeff, R. W., and Co.
Hearon, Squire and Francis
Hewlett and Sons
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Sons
Keith (Conc. Tinctures)
Kuhn, B.
May & Baker (Phenacetine)
Martindale (Nitroglycerine)
Sellers, J.
Southall Bros
Typke & King
White, Alfred and Sons
Woolley, Sons
Wyleys (Various)

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Oscar Andrese and Co.
White, Alfred and Sons

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Seabury and Johnson
Smith, W. F.
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Hooper, Dr.
Lorimer and Co.
McKesson and Robbins Ovoid-capsuled
Newbery and Sons
Sanger, J. and Sons
Smith, W. F.
Sonthall. Bros. and Barclay
Swann, H. H.
Warner, W. R. (Coated)
Wyleys and Co.

PILL MACHINES
Maw, Son and Thompson
Pindar, J. W.
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Toogood, W. (Coater)

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Smith, T. and H.

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Oscar Andreae and Co.
Zimmermann

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Duncan, Flockhart and Co.
Johnsen and Jörgensen
Oldfield, Pattinson and Co.

SACCHARIN
Allen and Hanburys
Burroughs, Wellcome and Co.

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Macfarlan and Co.
Smith, T. and H., and Co.

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Kuhn, B.

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Tyrer, P.

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London Homœopathic and Medical School
Manchester College
South London School of Pharmacy, Lim.
The School of Pharmacy
Tully, J.
Westminster College

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Waterston, G., and Sons

SELTZOGENES
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May, Roberts and Co.

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Maw, S., Son and Thompson
Pears' Soap
Stern, G. and G. (Pumiline Toilet and Sanitary)

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Cooper, W., and Nephews
Grindley and Co.
Tomlinson and Hayward

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Bowling and Govier
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Howlett, S.
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Raphael and Co

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Harvey, J. W., and Co.
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Chesebrough Manufctring Co.

VERMIN KILLERS
Battle, J. R.
Sanford and Son
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Clerk, W.
Corner, R. (Devonshir
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Gregory, S. W. (Vescio Sudorific
Gregory, W. (Devonshire Oils)
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Rothermel (Making)

WAFERS
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Oldfield, Pattison and Co.
Potter & Clarke (American, &c
Sonthall Bros. and Barclay
Sumner, R., and Co.
Symes and Co.
Thompson, Millard and Co.
Thompson, H. A., and Son
Willows, Francis, and Butler
Woolley, Jas., Sons and Co
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Ingram and Royle
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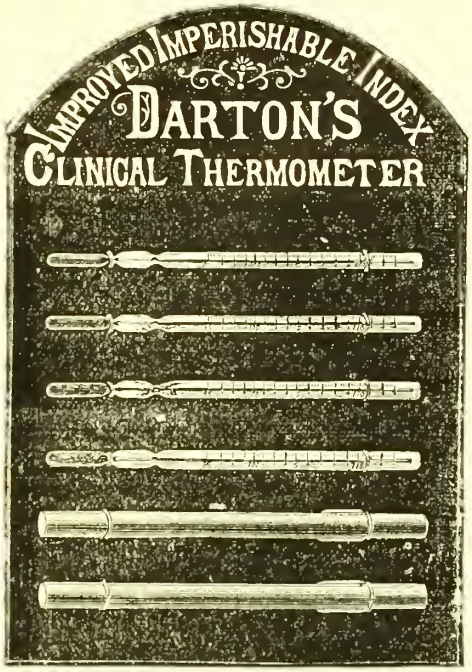
*** Ask for the COMPANY'S Extract, and see that it bears Justus von Liebig's SIGNATURE IN BLUE INK across the Label.



For the convenience of Chemists who are introducing these Instruments, we are now mounting same on an attractive Showcard, chocolate ground, gilt edges and gold letters. Price per doz., including 1 Card, 36/; ditto, lens front, magnifying, 72/. Morocco Pocket Case, containing 1 Bent and 1 Straight Clinical, 9/ the set. Kew Certificates to any of the above, 15/ doz. extra.

Special quotation for quantities.

CHEMISTS commencing the Spectacle business will find these Show Cases arranged with an assortment of Spectacles and Folders of all sights, to meet the requirements of purchasers. The quality and quantity may be varied to suit any class of trade at customer's wish. The Spectacle Show Case is of Solid Polished Mahogany, well made and finished, to stand any climate. Large Coloured Show Cards sent with each case, with descriptive pamphlet, &c.

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Darton's 2 Guinea Spectacle Show Case realises				£4 11s.
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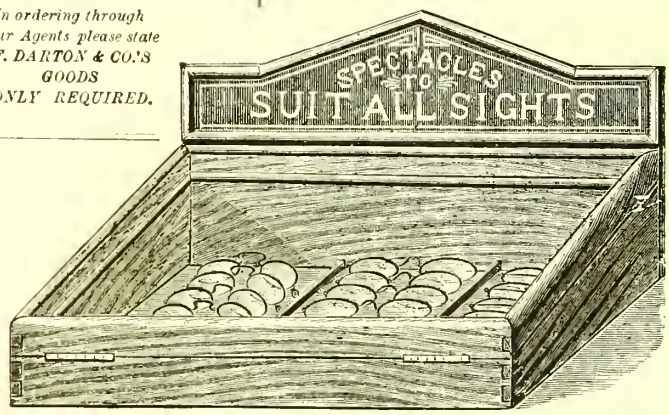
** This case we strongly recommend for Export.*



No. 1 Case, price £2 2s.; No. 2, £3 3s.; No. 3, £6 6s.; No. 4, £10 10s.; No. 5, £21

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MASON'S IMPROVED OPTOMETER

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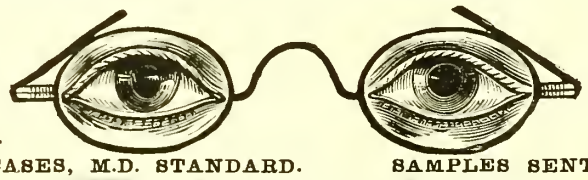

This instrument, while saving time and trouble in testing accurately, denotes the proper strength glasses required by persons suffering from long, short, or old sight, and is admitted by scientists to be one of the best instruments in use for measuring the loss of power of the eye—full and complete instructions with each.

OCULISTS' TRIAL CASES, M.D. STANDARD. SAMPLES SENT ON APPLICATION.

Special Easy and Accurate Fitting Spectacles for Astigmatic and Prismatic Lenses, same as supplied to the Ophthalmic Hospitals.

Repairs, of every description, in every case we execute and send back by return post.

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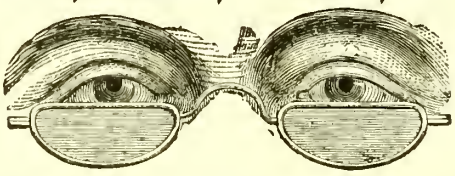

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Repairs Returned Same Day.

13 OXFORD STREET, LONDON, W.

HIGHEST AWARD AT AMERICAN EXHIBITION, LONDON.
SILVER MEDAL (1st Prize), NEWCASTLE EXHIBITION.
BESIDES MANY AWARDS AT PREVIOUS EXHIBITIONS.

ARTICLES WHICH PAY TO INTRODUCE

Because they are of the very best quality, and are put up most attractively, special samples and circulars being supplied for distribution.

The large demand in Great Britain for Colgate's Cashmere Bouquet Soap which has arisen in a very short time is the more remarkable because it has been created solely through the drug trade, without any newspaper advertisements.

The quality of the Soap, its handsome appearance and delightful perfume, make it sell on sight, while the distribution of the samples brings the customers promptly to the chemists who send them out.

See letter, "The Bright Side," in THE CHEMIST AND DRUGGIST, Nov. 5, 1887, p. 590; also Nov. 12, 1887, pp. 611 and 624.

Note opinion of THE CHEMIST AND DRUGGIST, Sept. 17, 1887.

A NEW SOAP.—The soap trade of chemists has greatly diminished, and has almost vanished so far as the lower qualities are concerned. The only chance for maintaining the returns from this department is to place novelties of a high-class character before customers, and we should think that there will be considerable satisfaction in introducing the Cashmere bouquet soap made by Messrs. Colgate & Co., of New York. This is a cream-coloured soap in oval tablets; it is remarkably pure and high-scented, and is put up in neat half-dozen boxes, with several elegant and artistic show-cards. The agents, Messrs. Burroughs, Wellcome & Co., inform us that a liberal supply of sample tablets (one-fourth the regular size) are presented to the retailer, so that sales may be facilitated. It is the favourite soap in the "States."

THOUGH NOT A CHEAP SOAP,

Quality considered, Colgate's Cashmere Bouquet Soap is the best value in the market. It is made from a special stock which is not employed by any other soap maker in the world.

SAMPLES—SPECIAL OFFER.

Until further notice, with each dozen of Colgate's Cashmere Bouquet Soap ordered of us, or through the wholesale houses, we will supply 1 doz. samples for free distribution if a request for same be made on order. The samples are one-fourth the size of the regular soap and are much appreciated by all who receive them.

With large orders we will supply special circulars to accompany samples bearing chemist's name and address only. Colgate's Cashmere Bouquet Soap has the largest sale of any superfine toilet soap.

Price, retail, 1s. 3d.; per dozen, 10s.; per gross, 110s. nett.

ORDER AT ONCE. IT WILL PAY YOU TO DO SO.

COLGATE'S
CASHMERE BOUQUET PERFUME

This exquisite odour, like that of the soap, is as distinctive as it is delicate and lasting. It is exceeding popular with the *élite* of society wherever it becomes known.

Prices: 1 oz., 2s. 6d. retail; 22s. doz.; 21s. 3d. in gross lots.
2 oz., 4s. retail; 30s. 9d. doz.; 29s. 7d. „ „

Also supplied in bond at special rates.

COLGATE & CO., 67 HOLBORN VIADUCT, LONDON, E.C.

"VASELINE."

NOTICE!! All sizes of our Preparations of Petroleum Jelly can now be obtained PROMPTLY from any of the Wholesale Houses.

The fancy word "VASELINE" indicates our make of Petroleum Jelly. It is the Registered Trade MARK of THIS Company and cannot be applied to any other goods without infringing the rights of this Company under the Trade Mark Act.

SEND FOR NEW PRICE LIST.

CHESEBROUGH MANUFACTURING CO. CONSOLIDATED (NEW YORK),

42 HOLBORN VIADUCT, LONDON, E.C.,

Proprietors and SOLE Manufacturers of the "VASELINE" Preparations.

"THE MOST POPULAR NEW REMEDY."

ANTIPYRIN!!!

In the post-card prize competition in THE CHEMIST AND DRUGGIST Antipyrin was by a large majority of votes pronounced to be "the most popular new remedy."

This is not strange, and is apparently the universal opinion of the Medical Profession and Drug Trade, for the reason that it combines the antifebrile properties of Quinine with the narcotic properties of Morphia and the anæsthetic properties of Cocaine, also without the bad effects of either.

It is probably unequalled for the treatment of Neuralgia and Congestive Headache, in which an adult dose of from 2 to 5 tabloids (10 to 25 grains) is equal to $\frac{1}{10}$ to $\frac{1}{4}$ grain of Morphia. Professor Germain See describes Antipyrin as "the remedy for sufferers and for pain."

It is most conveniently administered in the form of "Tabloids," containing 5 grains each, which are composed of the pure drug only, and are more easily swallowed than round pills.

Prices—Antipyrin Crystals, 3s. 5d. per ounce. Tabloids, in bottles of 25, 20s. per dozen; in bottles of 100, 70s. per dozen. Subject to usual Discount for Cash.

BURROUGHS, WELLCOME & CO., Wholesale Consignees, Snow Hill, LONDON, E.C.

J. & E. ATKINSON'S PERFUMERY.

CAUTION.

"TRADE MARK" AND NEW REGISTERED LABEL.

Messrs. J. & E. ATKINSON desire to draw particular attention to their new steel-engraved shield-shape Label, printed in two colours, blue and yellow, which they have introduced for the better protection of their customers against fraud. This new Label is now *exclusively* employed for all articles, in conjunction with the usual "Trade Mark"—a "White Rose" on a "Golden Lyre"—printed in seven colours. Messrs. J. & E. ATKINSON continue to manufacture their articles of *one and of the very best quality only.* Any goods bearing their name, but not having affixed to them the new Label as well as the "Trade Mark," should be rejected as fraudulent imitations.

☞ Messrs. J. & E. ATKINSON further warn their customers that their SOLE ADDRESS, which appears in full on their "Trade Mark" and new Label, is 24 OLD BOND STREET, LONDON, and that they are not in any manner related to or connected with any other firm carrying on business under the same or similar name.

J. & E. ATKINSON, *Wholesale and Export Perfumery and Fancy Soap Manufacturers,* **24 OLD BOND ST., LONDON.**

Price List free.] **ESTABLISHED 1799.** [Price List free.

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE:

NORMANBY CHAMBERS, MELBOURNE.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Post free to every country in the world. Single copies, 4*d.* each.

Supplied only to persons connected with the Trade

For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

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CIRCULARS TO THE TRADE.—We hope that firms who are thinking of issuing circulars to chemists and druggists will communicate with us before having them printed. We shall be able to insert such circulars in our issue of July 28, and will be happy to quote for the distribution of 11,000 copies. The price will be found much lower, and the results much better, than separate circulation through the post. In view of the striking testimony to the value of English journals in the promotion of business given by a German consul on page 51, this issue is specially valuable to advertisers.

THE publisher of *The Chemist and Druggist of Australasia* will make a tour through the United States, from San Francisco to New York, in the autumn. He will be glad to call on American firms *en route* who wish to talk with him concerning the drug business in the Australasian colonies.

CLIENTS of this journal visiting Melbourne for the Exhibition, or sending representatives there, are invited to make use of our office in that city (Normanby Chambers) as a postal address. On information being given to us in London that this will be acceptable, our Melbourne coadjutors will be promptly advised.

ADVERTISEMENTS of employers and assistants can be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

The Chemist and Druggist of Australasia.

JUNE 1, 1888.

CONTENTS OF No. 6, VOL. 3.

Editorial Notes:—"Acetic Acid and the Sale of Poisons Act, N.S.W.," "Prescribing by Chemists," "Opium Smoking," "The Dental Act, Victoria."

COLONIAL REPORTS.

New South Wales.—Pharmacy Board: Official Report, and Correspondence.

New Zealand.—Pharmacy Board of New Zealand: Report of Meeting.

South Australia.—Report of Monthly Council Meeting.

Victoria.—Pharmacy Board of Victoria, and Pharmaceutical Society of Australasia: Reports of Meetings.

Letters from our own correspondents in Sydney, Auckland Brisbane, Adelaide, Hobart, and Launceston.

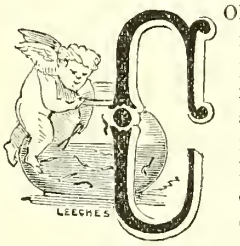
Students' Corner—Trade Notes—Literary Notes—The New Mineral Springs of Victoria—The Preparation of Olive Oil in the United States—Poisoning Cases, &c., &c.

(Copies may be obtained at the London Office, 42 Cannon Street, E.C., 6*d.* each, or the journal will be supplied to extra-Australasian subscribers at 5*s.* per annum.)

POST-CARD COMPETITIONS, 1888.

No. 7.

SUBJECTS FOR PAPERS.



CONFERENCE season is approaching, and investigators, writers of papers, and others of that ilk are reminded of the fact by the appearance of the "blue list." Some may not know what the "blue list" is. For their benefit we may explain that it is a four-page quarto sheet issued by the committee of the British Pharmaceutical Conference, and containing about a hundred suggestions of subjects for investigation. The peculiarity of the list is that investigators never seem to take any hints from it; but that matters little, for additions are only made to the list about once in a decade or so. This is not as it ought to be, and to put, if possible, some life into the thing, we ask subscribers and assistants to tell us during this month what they consider to be the subjects which pharmacy would be the better of having more light thrown upon. The subjects must, of course, be pharmaceutical; for example:—

(1) Suggestions on the putting-up of popular household remedies.
(2) What is the best method of making cold cream?
(3) How distinguish between annual and biennial henbane in the cut condition.

We do not restrict competitors to any one branch of pharmacy, but we ask them to suggest subjects upon which something profitable may be written in the space of a post-card. Nor will competitors be limited as to the number of suggestions; but we shall award one guinea to the most practical suggestion of all that may be received. A selection from these will be published in our first issue in August, as the basis of another competition, particulars of which will then be given.

Post-cards will be received up to Tuesday, July 31.

C

Metropolitan Reports.

SWIMMING.—Messrs. S. Maw, Son & Thompson's employés witnessed the final contest for the Travellers' prize of their swimming-club at Islington Baths on Monday, R. Jack, jun., being the winner. Last Saturday the second competition for Mr. C. T. Maw's challenge cup took place at Ponder's End on the river Lea, E. Braum coming in first.

THE ANNUAL HOLIDAY of the employés of Messrs. Evans, Lescher & Webb, wholesale druggists, Bartholomew Close, took place last Saturday at the "Clayton Arms," Godstone. After partaking of the good fare provided a brief toast list was gone through. "The Firm," proposed by the vice-chairman (Mr. R. Owers), was responded to by E. A. Webb, Esq. Other toasts that were honoured included "The Travellers," "The Ladies," "The Chairman and Vice-Chairman," and "The Committee." A thoroughly enjoyable day was spent.

CHARGE OF STABBING.—At the Thames Police Court last Saturday, Emma Pitman (25), was charged with unlawfully cutting and wounding Thomas Pitman, her husband, a chemist, of 232 Whitechapel Road. Prosecutor stated that he had been separated from his wife for the last three weeks, and that on the Friday night he went to see her, it being his birthday, and while in the house she stabbed him on the thigh with a knife. Other evidence showed that the prosecutor was drunk at the time, and, taking the whole into consideration, Mr. Lushington thought no jury would convict the accused, and she was discharged.

THE COMPANIES BILL.—A conference of representatives of Chambers of Commerce and of members of Parliament was held in the lecture-hall of the Society of Arts on Wednesday on the subject of the Companies Bill introduced by the Lord Chancellor. Colonel E. S. Hill, M.P., presided. Amongst the speakers were Mr. Mundella, M.P., and Mr. Joseph Chamberlain, M.P. The feeling of the meeting was decidedly against the Bill, for which there is no hope this session, and a resolution was adopted in which the meeting expressed the opinion that no Bill will be satisfactory unless it provides for winding up insolvent limited companies in local courts, the same as private firms.

CHARGE OF THEFT.—At the Guildhall Police Court, on Thursday, Charles Morse (18), George Hopkins (15), and Henry Phillips (16), clerks, employed by Messrs. Lynch & Co., of Aldersgate Street, were charged on remand with stealing a number of letters containing cheques and postal orders. In consequence of complaints made to the post-office, a detective went to the prosecutors' premises and spoke to Phillips about two postal-orders which he showed him. He said that the orders had been given to him by Hopkins, and they were filled up by Morse and himself. He then took them to the Smithfield Post-office and cashed them. Mr. Benbow, manager to the prosecuting firm, said that he wished to withdraw the charge against Phillips and Hopkins, as he believed they had been led away by Morse. Sir Henry Isaacs again remanded the prisoners.

L'AFFAIRE DUNSTAN.—In accordance with the resolution arrived at by the Pharmaceutical Council last week it fell to the lot of Professor Dunstan on Monday to convey to his students the Council's opinion of the memorial presented by them. It will be remembered that thirty students signed the memorial, the other half-dozen being so intimately connected with present and past office-bearers of the Society that they did not express their opinion. On Monday, before the lecture commenced, Mr. Dunstan, in very dignified style, said that it was his duty to convey the reply to the letter which the students had sent calling the Council's attention to the correspondence which had appeared in *a weekly paper* regarding him (throwing special emphasis on the italicised words). He then read the Council's resolution, and, continuing his remarks, said he was thoroughly ashamed of the students who had signed the memorial. It was altogether an irregular and improper proceeding, and only helped to damage their own reputation. He considered that they had never been better treated than they were now; the course of lectures had been altered for their convenience solely, and their responsive conduct was ungenerous and ungrateful. The explanation was received with perfect good nature by the students.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

FAVOURS TO COME.—So some remarked last Saturday, when the employés of Messrs. P. Harris & Co. had an outing to Berkswell at the expense of the firm. The weather was fine and an enjoyable time was spent. They returned all safe and sound at about 11 P.M.

THE NEW DEPARTURE.—Old-fashioned people retain the idea that the proper thing for a lad who wishes to become a pharmacist is to be apprenticed in a good old-fashioned business, where he will learn the rudiments of pharmacy and some science. Something more is wanted in these days, and it is offered this week by a limited drug company's store here, who offer a good home, require a premium, and will teach the art of cutting and of pharmacy.

THE EARLY-CLOSING MOVEMENT in Birmingham is being looked upon favourably by almost all classes of shopkeepers, and already the chemists (unhappily always the last in matters of this kind) are beginning to bestir themselves about the matter. Several chemists have within the last week been calling upon their craft to hear their opinions, but a prominent member has stopped progress by saying that he would not close if even all the other chemists in the town consented to do so. Since cricket has become an established game amongst us, from two to six on Wednesday afternoons we want to concentrate all our energies on the bat and ball, and forget all about the mortar and pestle during these hours.

CROYDON.

DOCTORS DISAGREEING.—At the Croydon County Court Mr. R. Warrener, L.S.A., sued Mr. R. T. Smith, F.R.C.S., for the sum of 3*l.* on account of surgery expenses. There was a counter-claim of 2*l.* 2*s*, in respect of drugs supplied. From the evidence it appeared that the defendant disposed of his dispensary in Crampton Road, Penge, to the plaintiff for 40*l*, selling for that sum the "practice, goodwill, drugs, utensils, and surgery fittings," the vendor further agreeing that if the receipts did not amount to 3*l.* weekly during the following three months he would pay to the purchaser 3*l.* on account of surgery expenses. The parties now point-blank denied each other's claim, but the evidence of the defendant showed that as the plaintiff ran out of drugs he supplied him with them until he was able to get some from Penge. The plaintiff utterly denied that these drugs were supplied, and accused the defendant of making a fictitious claim. He contended that defendant's representation was that he was doing 3*l.* a week, but he was in reality not doing 1*l.* a week. Defendant, however, contended that plaintiff might have taken 10*l.* a week, as he had done. After some further evidence the judge decided in favour of defendant, awarding him 2*l.*

FLINT.

A YOUNG THIEF.—At the Petty Sessions last week, John Walsh, a boy of 12, was charged with having stolen a tobacco pipe, of the value of 1*s.* 8*d.*, from the shop of Mr. T. F. Evans, chemist, Trelawney Square. Thomas Foulkes Wynne, an assistant in Mr. Evans's shop, deposed that the boy came in with another for 1 lb. of copperas, and he noticed that the boxes containing the pipes had been moved. He thereupon searched the prisoner and found the pipe. In cross-examination witness said he knew all the pipes, and identified the one in question by a peculiar mark inside the pipe-head. Mr. S. K. Muspratt, the presiding magistrate, found the prisoner guilty, and sent him to the training-ship *Clio* for four years.

MANCHESTER.

MR. ROBERT STOPFORD, who has for several years acted as assistant to Dr. Hayle, Rochdale, has now entered upon

the duties of medical officer to the Manchester Homœopathic Institution, Great Jackson Street, to which post he was appointed a week or two ago.

THE SURGERY PROFESSORSHIP AT OWENS COLLEGE.—The medical students at Owens College and the Manchester Royal Infirmary held an indignation meeting last week for the purpose of protesting against the appointment of Mr. Hare, of Edinburgh, which they regard as a slight upon the staff of the Royal Infirmary.

DRUGGISTS' CHARGES.—Considerable excitement has been caused in Manchester by the appearance in last Sunday's *Umpire* of an article on "How the poor are robbed," in which the druggist comes in, along with the baker and the butcher, for a large share of abuse. After quoting the wholesale and retail prices of Epsom salts and bicarbonate of soda, the "special commissioner" goes on to show how extortionate are the dispensing charges. "I took," he says, "a prescription to a chemist who depends mainly on the working-class for his living. The prescription ordered 1 drachm of bicarbonate of soda, 2 drachms of compound spirits of ammonia, 1 drachm of tincture of nux vomica, and infusion of gentian to 8 oz. I was charged 1*s.* 3*d.* Now, calculating the ingredients at the prices marked in the price-list issued by the largest druggists in Lancashire, the cost to the chemist did not, including bottle and cork and label, exceed 3*d.*, leaving 1*s.* profit. I asked was that the usual charge? I was told it was, unless the mixture contained more expensive ingredients, when the charge would be more." On the question of adulteration it is asserted that chemists are "far from innocent of the crime," and the statement is boldly made that tinctures and sweet spirit of nitre are made with methylated spirit.

There happens to come to us, opportunely enough, a a cutting from a paper called *Truth* published at Toronto, Ont., which shows the other side of the question. This is what is said: "Some people very foolishly complain that there are big profits in drugs. Why should there not be? The druggists have to go through a course of education just as lawyers and doctors have. Why should they not in the same way be compensated? Here is how a druggist lately expounded the case to an interviewer who talked with him as he put up a prescription. It may be he was rather out in the amount of profit he credited to himself. *Truth* is quite sure that many druggists have nothing like such a percentage, still there is reasonableness in his talk.

"'Now, there is a compound that is composed of exactly four ingredients. One of these ingredients at wholesale costs exactly 2 cents, the second 1 cent, the third 2 cents, and the fourth 3 cents, making a total of 8 cents.'

'"How much will you charge your customer for that prescription?'

"'Fifty-five cents. A handsome profit, but then you see the customer pays 47 cents out of the 55 for my experience as an apothecary. Men in other professions do the same as we do in this respect. For instance, a physician will look at your tongue and feel your pulse, and demand a fee of from 2 to 5 dollars, according to the length of your purse and his standing in society. If he is a high-toned or a fashionable doctor you may think yourself fortunate if you escape without being charged more than 5 dollars. It's the same with a lawyer. You visit his office, obtain his advice in a simple matter, and occupy his time for about fifteen minutes; he wants you to pay 25 or 50 dollars. Now, I have performed as much real service as a doctor or a lawyer, and all the compensation I ask is the small pittance of 55 cents.'"

To this *Truth* adds: "Druggists have, besides, good reason for complaining that, while they cannot prescribe as much as a piece of sticking plaster for a cut finger, a doctor can compound his own prescriptions without having served a day in a drug store and without having given the slightest evidence that he knows anything about the nature of drugs or about the way of compounding them."

NOTTINGHAM.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.—This society held their first picnic on Thursday afternoon, July 5, when about fifty ladies and gentlemen journeyed by train to Bleasby Station, and thence by road to Hazelford Ferry, a picturesque place on the banks of the River Trent. Here cricket, fishing, and other sports were engaged in, and afterwards the party sat down to a substantial meat tea provided at the Star and Garter Hotel. After tea the president, Mr. Councillor Fitz-Hugh, J.P., congratulated those present and the society upon such a successful gathering, and thought their best thanks were due to the secretary, Mr. Widdowson, and members of the picnic committee for their efforts in promoting the same. The remainder of the evening was spent in a pleasant social manner, and the party returned home about ten o'clock. A general feeling was expressed that the picnic should become an annual affair, and so it is likely to be.

A PUBLIC ANALYST IN ERROR.—At the Derbyshire quarter sessions last week a letter was read from Mr. Otto Hehner, the county analyst, explaining the error by which he had given an erroneous analysis of a sample of whisky sent to him by Captain Sandys. Mr. A. H. Allen as well as Somerset House had differed from him about it. He admitted that he was wrong, and stated in excuse that it was such a small sample ($\frac{1}{4}$ oz.) that he departed from his rule of making two concordant independent analyses. He expressed his intense regret at the mistake, and added that he had analysed thousands of samples without any hitch or error, and to the expressed satisfaction of the authorities employing him. He had now arranged for being supplied with larger samples, "when all possibility of mistake will be avoided." On discovering the error he at once made the only reparation in his power by paying the full costs incurred by the defendant and by the county. The Hon. Frederick Strutt thought it was a very lame defence, and, considering the manner in which Messrs. Cox and Garrard had been treated in the matter, he thought there ought to be very much more caution observed. The case had been the talk of Derby and Belper and the neighbourhood, and he had had accounts given him of other cases where similar things might have occurred but for the judgment of Captain Sandys in withdrawing them. He hoped they would not have this kind of thing to complain of again. The Chairman said the letter was certainly meant as an apology, and as a defence he agreed that it was a lame one, as Mr. Hehner admitted he had not taken the precautions he ought to have taken.

SHEFFIELD.

PALM OIL IN MARGARINE.—Mr. A. H. Allen, the borough analyst, in his last quarterly report mentions that one sample of margarine which he has examined gave distinct evidence of the presence of palm oil, the use of which in the manufacture of margarine has often been suspected, but can hardly be said to have been definitively established hitherto.

IRELAND.

DUBLIN.

LAY OPINION ON THE PHARMACY BILL.—*Freeman's Journal*, in an editorial on the Pharmacy Bill, states that "it goes to the House of Commons a far more drastic and far-reaching scheme than the original draft could have led one to anticipate. Many will say its thoroughness is its greatest defect; for some of the provisions appear to be unnecessarily severe upon chemists and druggists who are actually in business. In so far as the Bill provides safeguards against the sale of poisonous drugs by ignorant persons, its principle cannot be impeached. But objection may fairly be taken to it as a proposal for giving to the Pharmaceutical Society the power to unjustly create a monopoly. None but a registered member or associate of the Society paying an annual fee can, after the passing of the Bill, sell poisonous drugs." Here our contemporary is wrong, nor is it very wise in saying that the provision in the Bill for the examination of candidates for the title "registered druggist" will "give the Council of the Pharmaceutical Society power to exclude all whom that body may choose." The regulations of the examination, before they can be enforced, must be approved by the Privy Council. For that reason chemists and druggists should, as a body, remain united, so that their voice may be heard on any such matters at the proper time, and more especially the present.

SCOTLAND.

DUNDEE.

STILL THEY COME.—Another shop for the dispensing of medicines and the sale of drugs, &c., is about to be opened at 225 Lochee Road, which will tap the population of Lochee. There is a rumour that a new pharmacy is also to be opened in Whitehall Street, which with the one now being fitted in Commercial Street ought to keep things lively.

GLASGOW.

THE SOCIETY OF CHEMICAL INDUSTRY.—The excursions which the local committee organised for the benefit of those who attended the annual meeting turned out a great success. About seventy went to the Forth Bridge works, fifty to Broxburn oil-works and the same number to Thornliebank print-works, at both of which luncheon was provided; fifty also went to the Langloan and Summerlee ironworks. The principal excursion on Thursday, however, was that to the Ardeer factory of Nobel's Explosives Company. For this 150 of the members assembled at St. Enoch's station shortly after 10, leaving at 10.30 A.M. by a special train provided by the directors of the company. The train, in addition to its live freight, contained excellent ballast in the shape of creature comforts. Ardeer factory is situated between Saltcoats and Irvine, amidst a dreary and desolate-looking stretch of sandhills, and covers an area of nearly 400 acres. The explosives departments are separated by wide sand embankments, and are further protected from the possibility of a general explosion by being situated at considerable distances from each other. Here about 400 hands are employed, including a staff of competent chemists. The visitors having arrived at the factory first inspected the laboratory arrangements, and that done an operation was performed which created much amusement, everyone having to pass through the searcher's hut and give up matches, pipes, keys, &c., in their possession. The manufacturing departments were then visited, and at one o'clock a company of 200 sat down to luncheon, provided by the board of directors, Thomas Reid, Esq., the chairman, presiding. A few toasts followed, including "The Health of the President, and Success to the Society," proposed by Sir Charles Tennant, and responded to by Professor Dewar. Then Mr. Mond returned the compliment by proposing "Success to Nobel's Co.," Professor Dewar giving "The Staff." To the latter Mr. McRoberts, who has long been ill from overwork and the anxieties of such an undertaking as Nobel's, managed to be well enough to reply, and later he gave proof of his energy in a splendid series of experiments with explosives, so arranged as to demonstrate the safety as well as the power and local force of dynamite and blasting gelatine. For example, an iron block weighing 400 lbs. was allowed to fall from a height of 25 feet on to a 50-lb. box of dynamite. The box and contents were smashed, but there was no explosion. Later, however, the same iron block was shattered to pieces by the explosion of the dynamite. All the experiments were over before 5 o'clock, and the company returned to Glasgow by train at 5.30. In the evening there was an informal smoking concert, presided over by Professor Dewar. This was arranged by Mr. Henderson, of Glasgow, and Mr. Hutchinson, of London, and proved to be a great success, as was also the excursion "down the Clyde" in the new steamer the *Victoria*, which, with a party of 200, steamed from Broomielaw to Brodick Bay and back. In the course of the afternoon luncheon was served in the dining-saloon of the steamer. After luncheon Professor Dewar and Mr. Mond spoke in the highest terms of the arrangements made for the meeting by the local section, and of the hospitality shown by its members. In reply, Mr. P. R. Tatlock attributed the success of the gathering to Mr. G. G. Henderson, the secretary, and this, we know, is the universal opinion.

MONTROSE.

MR. ALEXANDER DAVIDSON, pharmaceutical chemist, is at present having built for him in the High Street, next door to the post-office, a handsome new shop with offices and dwelling-house attached to it.

WE made Mr. E. J. Gray an alderman last week, and at the same time the City of London elected him a sheriff.

FRENCH PHARMACEUTICAL NEWS.

(*From our Paris Correspondent.*)

HOSPITAL PHARMACISTS FOR LYONS.—A public competition will be held, on August 9 for eight positions of pharmacists-adjunct, and several assistants-adjunct, in the Lyons hospitals and asylums.

TIT FOR TAT.—At St. Gaudens, department of the Haute-Garonne, Dr. H. B. entered a complaint against E. V., a pharmacist of the place, charging him with unlawfully practising medicine, whereupon the *pharmacien* retorted the other day by a charge of unlawful practice of pharmacy against H. B. Both cases came up at the same time before the court, and the two defendants having pleaded guilty, the judge imposed on each a fine of 35f. Very satisfactory, and thoroughly Gascon.

MEDICINE CHESTS FOR PUBLIC SCHOOLS.—The Paris Municipal Council, having failed in its attempts to establish municipal pharmacies, has now fallen back on its common schools, and is going to provide each of them with a small medicine chest to be used in case of accidents. The "portative pharmacies," as they call them, are to be very modest at first, and will contain only such simple substances such as camphorated alcohol, arnica, carbolic lotion, ammonia, bandages, lint, &c., but it is not likely our aldermen will be long satisfied with so little.

RATHER ROUGH ON GENERAL BOULANGER.—A month or two since the Nancy students made a demonstration in favour of the "Brav' Général," and got into collision with the police. M. Marconnet, a medical student, was for his share awarded two months' imprisonment by the Correctional Tribunal, and last week brought up before the Academic Council for further favours. But the Council took a lenient view of the offence, and sentenced the culprit to be simply reprimanded. The reasons for the decision were that "M. Marconnet was the youngest of those convicted by the court; he was not the author of the bills inciting the populace to disorder; and finally, being an Alsatian, he might to some extent have believed in General Boulanger." In the last sentence the Council hit the General harder than the student.

PATENTED ARTICLES AT THE COMING INTERNATIONAL EXPOSITION.—A Bill is now being pushed through Parliament, and will probably become law in good time, providing the following protection for intending foreign exhibitors:—(1) Anyone holding a French patent shall be allowed to sell in France, without any forfeiting of rights, the objects manufactured abroad and similar to those patented, when said objects shall have been allowed to be exhibited. (2) Anyone holding a French patent, who shall have exhibited an article similar to the one patented, shall be held to have actually worked his discovery or invention in France during the official period of the exhibition. (3) Articles exhibited which shall be charged to be counterfeit shall be liable to seizure in the exhibition upon description only (4) Objects exhibited by foreigners shall not be liable to seizure when the seizer is not protected in the country to which the seizee belongs, but such objects shall not be allowed to be sold in France.

ALMOST A RIOT IN A PHARMACY.—On July 3 Professors Planchon and Jungfleisch, accompanied by *Commissaire de Police* Santucci, visited according to law a pharmacy kept by M. Vié at 69 Avenue du Maine. The proprietor was absent, but an assistant named Paton was there to attend to the business. In the course of the inspection several vials containing poisons were found which were not properly labelled, the name being only written on the cork or a slip of paper held between the stopper and the neck of the bottle. On being mildly remonstrated with Paton made some insolent reply, and began to abuse the two professors. Then Commissaire Santucci having interfered and threatened immediate arrest, P. became violent, seized a knife, and tried to stab him; only a skilful move prevented the thrust, which was supplemented by a blow from P.'s fist. Things looking serious, policemen were called in, but the desperate man tried to incite a riot, calling out to the working-men abounding in the neighbourhood to help him against police assassins. A threatening crowd immediately collected, when Santucci—evidently a man of

genius—cried out, "*Laissez, c'est un empoisonneur!*" (Stop, he is a poisoner!), and while the bystanders were scowling at P. he was quickly, although struggling and yelling, packed off to the police station. But the professors, now masters of the field, were rather embarrassed with their victory. The proprietor of the pharmacy could not be found, and it would never do to leave the porter in charge. So finally they concluded to lock up the poison closet, leaving word with the man that M. Vié could have the key by calling at Professor Planchon's office in the College of Pharmacy. This he did the next day, with many humble apologies for the behaviour of his assistant, who, it seems, is not a regular *élève* pharmacist, but a medical student of some sort or other.

The Hyères Poisoning Case.—The Comte de Villeneuve on July 6 was arraigned before the Toulon Correctional Tribunal on the technical charges of homicide through imprudence and deceit on the nature of goods sold. In fact, wine proved to have come from his warehouses nearly poisoned the whole village of Hyères, all who drank it being more or less affected, and some seventeen having died from the arsenic contained in the beverage. The facts have been admitted by all. The Count is a large and wealthy landowner, aged about 48, an extensive vintner, something of a chemist, and always (till now) highly esteemed by his neighbours. In his direct examination he said in 1879 he procured from Germany several kegs of arsenic for the purpose of making a compost against phylloxera. At first, he admitted, he had denied the purchase of the poison, but it was to shield the person from whom he had bought it. Later on, the experiment having been unsuccessful, the last keg, half full, was nailed up, and stored away in a garret. When the judicial investigation was made, the vessel was found open; but he could not account for that, and thought himself the victim of some wicked revenge. On the other hand, there was abundant evidence to show that the Count was in the habit of doctoring his wines, and dropping into the tuns packages of white powders concealed in his coat pockets. To be just, it must be added he explained they consisted only of plaster and tartaric acid, substances in common use, and almost necessary for a proper clarification of those heavy Southern wines. The trial has dragged along with an immense amount of irrelevant testimony, some evident perjury, and a sprinkle of funny incidents, such as obtuse witnesses, Piedmontese labourers who could speak neither Italian nor French, and were with difficulty provided with a patois interpreter, &c. But, on the whole, the foregoing is an account as impartial as possible of this sensational affair. The trial was concluded on Wednesday. The Count was acquitted of the more serious charges of manslaughter and so on, but he was found guilty of causing grievous bodily harm, and was sentenced to twenty days' imprisonment and a fine of 100f.

THE PARIS SOCIETY OF PHARMACY.

The regular monthly meeting of the society was held on July 4, President Delpech occupying the chair, Secretary Planchon reading the correspondence, and the great public being represented by The Chemist and Druggist's correspondent. Yet, it must be acknowledged, the proceedings were interesting enough to have an audience, if not more appreciative, at least more numerous.

Urobiline.

M. Grimbert read a paper on a new process for separating urobiline from normal urine, by boiling it with an equal weight of hydrochloric acid, and after cooling shaking with ether. On spontaneous evaporation the colouring principle is obtained. M. Marc Boymond compared with M. Grimbert's specimens some of his own prepared by Méhu's classic process, and both agreed that most of the colouring substances described under various names by writers are simply modifications of the same principle of normal urine.

Interesting Documents.

M. Planchon showed some old documents which are to be preserved in the society's archives. One was the minutes of the proceedings of February 2, 1814, when Parmentier's gift was accepted, founding a 600f. prize for discoveries of vegetable proximate principles. In 1815 no prize was awarded. In 1816 the society added 300f. to the amount to stimulate investigators, but somehow, perhaps owing to the troubled times, no competitor ever appeared, and since then the prize has been lost sight of. Another old document was a letter by Mr. Jacob Bell, president of the British Pharmaceutical Society, requesting for his association, in very good French, the honour of closer relations with their Paris brethren, exchanging publications, &c.

Pepper Adulteration

was brought up for discussion in consequence of a pamphlet on the subject by M. Gilet, who most especially considered the fraudulent addition of ground olive seeds, the usual sophistication in France. In M. Planchon's opinion the writer appeared to try to muddle the question in the interest of large manufacturers. The microscopical examination, the professor believed, is quite reliable, notwithstanding all the exception taken by M. Gilet, and the clamours of the large merchants who have been convicted of adulterating their products. There is no possible confusion between the sclerous cells of pepper, forming when ground recognisable plates, and the olive seed cells, which are quite different both in colour and appearance. To one moderately expert with the microscope there is as much unlikeness between the two as between bran and salt, to use a familiar comparison. M. Crinon did not find fault with M. Gilet's process—namely, the use of tincture of iodine—but said the method is an old one, proposed some years ago; while M. Ferrand, who is connected with the Pharmacie Centrale, gave it as his opinion from experience that Gilet's process is not a bad one by any means, and is especially convenient for the use of large dealers. As Professor Planchon maintained the microscope's superiority, the truth seems to be that either process is good, when one knows how to work it. Tincture of iodine strikes a deep blue colour with pepper, and only a light yellow with olive seeds, which renders the distinction easy.

Detection of Traces of Bismuth.

M. Léger made a communication, illustrated with experiments, on a test for bismuth which he proposes. One of the most sensitive tests for alkaloids, he said, whether they be natural or artificial, is the double iodide of bismuth and potassium. The reaction, it is true, is quite general and reliable, but not very instructive, because it has never helped us so far to form more definite conceptions of the constitution of alkaloids. The idea then came to M. Léger of reversing the test, and using an alkaloid to detect bismuth instead of bismuth to show up alkaloid. He found the reagent very satisfactory in all respects, especially as regards sensitiveness. For obvious reasons cinchonine was the alkaloid selected. A solution of potassium and cinchonine hydriodate added to a liquor containing 1 per 10,000 of bismuth gave immediately a bright red precipitate; with 1 in 100,000 of water a very appreciable tinge could be observed even from a distance. With 1 in 500,000 a faint hue can with some precautions be recognised. At the same time care must be taken how the bismuth solution is made; there should be no alcohol, no alkalies, or excess of sulphuric acid. To further extend the usefulness of the test, he tried to use it for quantitative estimations of bismuth, but so far without success, owing to the uncertain composition and keeping properties of the precipitate. Hence it can only be recommended as a qualitative test for bismuth, but an excellent one. In answer to a query by M. Petit, M. Léger added that mercury could not be mistaken for bismuth with the test in question. While bismuth affords a very bright red precipitate, mercury gives only a faint yellow one, and but little of it.

Debasement of Pharmacy.

A letter from the Provident Association of the Seine Pharmacists of the first class was read, asking for the Society's support in preventing the further debasement of pharmacy in the Seine Department—which means a continuation of the permission to second class pharmacists to practise in Paris, originally granted in 1867 by Minister Duruy. After discussion it was decided to pass a resolution declaring the Paris Society of Pharmacy to heartily support the prayers presented to the administration by the association just mentioned.

Before adjourning an election was held for a resident member, and M. Morellet was the successful candidate.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on Wednesday, July 4; present—The President (Mr. J. E. Brunker, M.A.) in the chair, the Vice-President (Mr. Draper), Dr. Collins, Sir George Owens, Messrs. Allen, Beggs, Grindley, McCormack, Doran, Hayes, and Simpson.

Physicians and the Pharmacy Bill.

A letter was received from Dr. J. W. Moore, secretary of the King and Queen's College of Physicians, stating that the president and fellows approved of the provisions of the Pharmacy Act (Ireland) 1875 Amendment Bill, and had petitioned the House of Lords in its favour.

Sir George Owens: Did you hear from the Apothecaries' Hall?

The President: Yes. Their petition in favour of the Bill has been presented in the House of Lords, and I have another for presentation to the House of Commons.

More Amendments Required.

A letter was read from a member of the Society complaining of a breach of the Pharmacy Act.

The President remarked that the letter suggested a further amendment in the 15th section of the Amendment Bill.

The Vice-President said the proposal was well worthy of consideration.

The President said that without some provision of the kind suggested there might be considerable difficulty in enforcing the other provisions of section 15. A person applied to for the name of his manager might give that of some individual who was not in the place at all.

It was ordered that the writer of the letter should be informed that the case he mentioned was provided for in the new Bill, and that the point he suggested would receive further consideration.

The New Preliminary Examination.

A letter from Sir William B. Kaye, Q.C., Clerk to the Privy Council, was read, stating that the order in council approving of the new Preliminary curriculum could not now be altered or postponed.

The President said he was very glad that this communication had been received, as it would put a stop to their making regulations one day and setting them aside the next. The regulation establishing the new Preliminary curriculum was passed by the Council after considerable discussion, and was then sent to the Privy Council, who affirmed it; the next step taken by the Council of the Society was to postpone the operation of it for three months. The Privy Council had said "No" to that. The Preliminary examination on Monday last was held under the new system, and evinced a decided improvement. The examiner gave a paper in English Grammar, which was not previously set, but which was a very necessary test for young men coming into the profession.

The Bill Progresses.

A letter from Dr. Jacob, Secretary to the Royal College of Surgeons, addressed to the President, was read, stating that the Council of the College had remitted the communication addressed to them by the Council of the Society on the subject of the Pharmacy Act Amendment Bill to the Parliamentary Committee to take such action thereon as they should deem advisable.

The President then reported the progress that had been made in the promotion of the Pharmacy Act 1875 Amendment Bill. To put it shortly, on the previous night the Bill was read a third time in the House of Lords in a shape which he considered to be a very great improvement on the Bill that they had originally drafted. The members of the Council were already aware that at the request of the Government, and especially of Mr. Balfour, the Bill was referred to a Select Committee of the House of Lords. Mr. Hayes, Mr. Allen, and he (President) attended before that committee as witnesses. On the first day five opposing witnesses were heard against the Bill, namely, four from Belfast, and one from Dublin. He did not think their evidence made much impression upon the committee, or showed that there was very much ground for their complaints. At the same time, they afforded the deputation from the Council an opportunity of accepting a couple of suggestions that they made, which showed that the former were disposed to give way on any reasonable point, and so far impressed the committee in their favour. After the case for the Council had been opened they succeeded in establishing the justice of what they were seeking for. The members of the committee listened very carefully, and appeared to take a great interest in everything that was laid before them. Lord Limerick, who represented the Government, closely watched everything, and made suggestions. Lord Meath, who apparently knew nothing beforehand about the subject, also interested himself very much in it, and at the close of the evidence showed by his pointed questions that he had thoroughly grasped the the whole case. After hearing all the evidence the committee sat for two days. During that time the members of the deputation remained in attendance on them, and were frequently called in for the purpose of consultation. None of the changes that were made in the Bill were made without considering the Council's side of the question. The Bill as now printed went in some respects farther than anything that the Council had ever expected to get. A good many of the changes, however, were mere matters of form. For instance, the 5th and 6th clauses had been changed in form, and also shortened by means of schedules annexed to the Bill. The principal addition to clause 6 was a provision giving to persons who were apprentices or assistants from 1875 to 1881 the privilege of registration upon their passing an examination; but there was a restriction to the effect that they must have been apprentices or assistants for four years in the employment of men who shall have been themselves registered. Clause 5 had been altered by the reduction of the fee payable by a man who was in business in 1875 from two guineas to one guinea.

Mr. Grindley: I thought the fee under section 6, including that for examination, was three guineas in the draft Bill.

The President: No; two guineas, and 10*s.* 6*d.* for registration.

Mr. Allen presumed there should be both arts and chemical examiners.

The President, in continuation, said a cry made by their opponents was that they were going to be taxed without getting anything for their fee, and some members of the committee immediately got hold of the cry of "No taxation without representation." The deputation thereupon agreed to import into the Bill a section on the same lines as the 18th of the original Act, authorising persons who should be registered as druggists to become associate members of the Society on paying the same fee as members, and giving them a voice at the annual meeting and in the election of members of the Council. They asked to be allowed a representation on the Council; but that the deputation refused point blank to concede, contending that it would be absurd that men, some of whom had passed no examination at all, and others only a very minor examination, should be allowed a voice in the higher education of pharmacists. In that view the deputation were borne out by the committee. The opposing witness who was first examined said he thought those for whom he spoke should have a fourth of the representation, while the next, astonished at his moderation, asked for "half" of it. (A laugh.) Clause 9 had to be altered sequentially in order to relieve associates from the 10*s.* 6*d.* fee. Clause 12 in the original Bill was one which they saw from the start that the committee did not like. It provided that it should be "unlawful for any registered druggist to keep open shop for the retailing, dispensing, or compounding of medical prescriptions, or to allow any part of his premises to be used for such purpose." They said that the first part of that clause was superfluous, because it declared to be illegal that which was already illegal by law, under both the Apothecaries Act and the Act of 1875. A witness had been examined on the point, and the question was asked, was the clause intended to hit the case of that particular gentleman—which it certainly was not. He (the President) offered an alternative clause to the effect that it should be unlawful for any registered druggist to let off any part of his shop or premises to be used for the purpose of retailing, dispensing,

or compounding medicinal prescriptions, unless such portion of his shop was provided with a distinct supply of drugs, chemicals, and books of account, and was managed in all respects as a separate establishment. However, the committee did not yet like it, and eventually, on the motion of Lord Meath, the following substitute clause, which really went much further than the original one, was inserted as clause 13 of the Bill, viz.:—

> Every person practising as a registered druggist under this Act shall display conspicuously outside his place of business a notice, in legible characters, as follows:—"Not licensed to dispense or compound medical prescriptions," and in default shall be liable to a penalty not exceeding 1*l.* for every day during which such default shall continue.

The remaining alterations were of a merely verbal character.

Mr. GRINDLEY: I notice that we are only given the declaration of one medical man or magistrate with respect to an applicant for registration.

The PRESIDENT: I fought as hard as I could for two, but the committee appeared to think that one was sufficient.

Mr. GRINDLEY: There are cases where we would be very glad to have more information than could be supplied by one person.

The PRESIDENT said the words in the original clause relating to the preliminaries for registration, "or such additional evidence as they should think fit," had been also struck out; but he was glad of that, and when consulted by the committee had so expressed himself, because those words would have left an opening for numerous applications for exceptional treatment in different cases. It was better to have a hard-and-fast line as to what evidence they were to accept or refuse.

Mr. GRINDLEY: We can prosecute any man who makes a false declaration.

The PRESIDENT said the schedule which the applicant would have to fill up would be a statutory declaration; and if it were false the maker would be liable to very heavy penalties. He would be guilty of a misdemeanour under the old Act (s. 28).

The VICE-PRESIDENT: My opinion is that if you have not been able to get exactly what you wanted you have certainly got things that you never anticipated that you would obtain. And I think we are all agreed that our very best thanks are due to our President for the tact, energy, perseverance, and enthusiastic patience with which he has gone through this matter. (Hear, hear.) I am not going, however, to make any formal motion to that effect yet, unless others are of opinion that it should be done.

Sir GEORGE OWENS: I would put it formally.

The PRESIDENT: Wait, please, until the work is done. We are not out of the wood yet. And do not suppose that the work was all done by me. The assistance rendered by Mr. Allen and Mr. Hayes before the committee was invaluable.

The VICE-PRESIDENT: I have not lost sight of that at all. If I had been making a formal motion on the subject I would have said so; but I am now merely expressing my own feeling in the matter.

Mr. GRINDLEY: It is the sense of all the Council.

Mr. HAYES remarked that the members of the committee appeared to place the greatest confidence in everything that Mr. Brunker said. He was called on by them to consult on every step before they adopted it.

The PRESIDENT said section 13 of the Bill as it stood was Lord Meath's suggestion. He (the President) would complete his report by adding that on Saturday last he had a consultation with Mr. Clay, who told him that Mr. Close would endeavour to ascertain what steps the Government would take with regard to the Bill in the House of Commons. From the interest Mr. Balfour had already evinced in the subject he (the President) had great hopes that he would see the Bill through this session. He had received a letter from Messrs. Clay & Close relative to arrangements for the introduction of the Bill in the House of Commons. Nothing could exceed the trouble which Lord Milltown had taken in connection with the Bill, and the intelligent insight he had gained into all the bearings of the case.

RAYS OF HOPE.

A report from the Certificates Committee was laid on the table.

The PRESIDENT said the Council had been accused of not getting a sufficient number of persons into the profession. An answer to that was supplied by the facts that on the previous Monday twenty-one young men presented themselves at the Preliminary examination, and that twelve were in for the Licence on that day (Wednesday), most of whom had passed preliminary examinations other than the Society's.

On the motion of the PRESIDENT, seconded by Mr. GRINDLEY, Mr. Edward McCreery Shea Hill, of 5 Donono Place, South Circular Road, Dublin, was admitted a member of the Society.

The Council then adjourned.

Pharmaceutical Society of Great Britain.

PRELIMINARY EXAMINATION.

This examination was held at the various centres on Tuesday, when the following questions were put, one hour and a half being allowed for each subject, with an interval of an hour between the arithmetic and the English papers:—

ARITHMETIC.

(*The working of the questions, as well as the answers, has to be written out in full.*)

1. A man bought 1,000 yards at 3*s.* 7¼*d.* per yard, and sold the whole at a profit of 2¼*d.* a yard. Find the whole amount received, and the total gain.

2. A man said that he would each year spend half his income, save a third, and devote a fourth to his business. His income was 780*l.* a year. Point out his blunder, and divide his income rightly in the same proportions.

3. Express 2·41$\dot{6}$ as a vulgar fraction, and divide ·072108 by 4·006.

*4. Give the equivalent of a décimètre in inches. Find, approximately, the number of solid inches in a cube the length of whose side is a décimètre.

*5. A barrel containing 90 litres of liquid weighs 36 kilog. 5 hectog.; empty, it weighs 7 kilog. 7 hectog. Find the weight of one litre of the liquid, and the value of one centilitre at the rate of 2½*d.* for one gramme.

6. A person is able to perform a journey of 142·2 miles in 4½ days when they are 10·164 hours long; how many days will he be in travelling 505·6 miles when the days are 8·4 hours long?

7. If 9 per cent. be lost by selling a thing for 78*l.* 15*s.*, what will be gained or lost per cent. by selling it for 90*l.*?

LATIN.

I. (*For all Candidates.*) Translate into Latin:—

1. The boys will come that they may see the battle.
2. My son, give this book to Titus thy brother.
3. The city being taken, the citizens fled.
4. We know that Caesar conquered the Gauls.
5. The ambassadors spoke so wisely that they were praised by all men.

II. Translate into English either A. (Caesar) or B. (Virgil).
(*Candidates must not attempt both authors.*)

A. CAESAR.

1. In eo itinere persuadet Castico, Catamantaledis filio, Sequano, cujus pater regnum in Sequanis multos annos obtinuerat, et a senatu populi Romani amicus appellatus erat, ut regnum in civitate sua occuparet, quod pater ante habuerat; itemque Dumnorigi Aeduo, fratri Divitiaci, qui eo tempore principatum in civitate obtinebat ac maxime plebi acceptus erat, ut idem conaretur, persuadet, eique filiam suam in matrimonium dat. Perfacile factu esse, illis probat,

* At least one of these two questions must be attempted by every Candidate.

conata perficere, propterea quod ipse suae civitatis imperium obtenturus esset; non esse dubium quin totius Galliae plurimum Helvetii possent; se suis copiis suoque exercitu illis regna conciliaturum, confirmat.

2. Qui se ex his minus timidos existimari *volebant*, non se hostem *vereri*, sed angustias itineris et magnitudinem silvarum, quae inter eos atque Ariovistum *intercederent*, aut rem frumentariam, ut satis commode supportari *posset*, timere dicebant. Nonnulli etiam Caesari renuntiabant, quum castra moveri ac signa *ferri jussisset*, non fore dicto audientes milites, neque propter timorem signa laturos.

Grammatical Questions.

(For those only who take Caesar.)

1. Decline, in the singular, *eo itinere* and *totius Galliae*; in the plural, *suo exercitu*. (Par 1.)
2. Give the principal parts of the verbs in italics. (Par. 2.)
3. Parse, fully, *quae, jussisset, fore, audientes*. (Par. 2.)
4 Write in Latin—11, 23, 37, 86, 2*nd*, 17*th*, 39*th*; and decline *tres*.

B. VIRGIL.

1. Olli subridens hominum sator atque deorum
Vultu, quo coelum tempestatesque serenat,
Oscula libavit natae; dehinc talia fatur:
Parce metu, Cytherea; manent immota tuorum
Fata tibi; cernes urbem et promissa Lavini
Moenia, sublimemque feres ad sidera coeli
Magnanimum Aenean; neque me sententia vertit.

2. Postquam introgressi, et coram data copia fandi,
Maximus Ilioneus placido sic pectore *coepit*:
O Regina! novam cui condere Jupiter urbem,
Justitiaque *dedit* gentes frenare superbas,
Troës te miseri, ventis maria omnia vecti,
Oramus; *prohibe* infandos a navibus ignes;
Parce pio generi, et propius res *aspice* nostras.
Non nos aut ferro Libycos populare Penates
Venimus, aut raptas ad litora *vertere* praedas:
Non ea vis animo, nec tanta superbia victis.

Grammatical Questions.

(For those only who take Virgil.)

1. Decline, in the singular, *placido pectore* and *pio generi*; in the plural, *gentes superbas*. (Par. 2.)
2. Give the principal parts of the verbs in italics. (Par. 2.)
3. Parse, fully, *olli, metu, tibi, feres*. (Par. 1.)
4. Write in Latin—11, 23, 37, 86, 2*nd*, 17*th*, 39*th*; and decline *tres*.

ENGLISH.

1. Enumerate the different forms of the present tense in English, and give illustrations of each form.
2. Analyse the following sentence:—

"*All* desp'rate hazards courage do create,
As he plays *frankly who* has least estate;
Presence of mind and courage in distress,
Are *more than* armies to procure success."

3. Parse fully the words in italics in the sentence above. (Question 2.)
4. In the following passage supply the necessary capital letters, and put in the stops and inverted commas where requisite:—he went straight up to the ambassador of england and said to him in a state of extreme agitation my lord have you news from england then without scarcely awaiting a reply he continued you wish for war then no general replied the ambassador with much deliberateness of manner we feel too much the advantages of peace you wish for war then continued the first consul in a very loud tone of voice we have fought for ten years you wish then that we should fight for ten years to come how can they dare to say that france is arming itself they have imposed upon the world.
5. Write a short composition on *one* of the following subjects:—
(i.) The Responsibilities of Wealth.
(ii.) Emigration.
(iii.) How a Channel Tunnel would affect this country.
(iv.) "God made the country, but man made the town."

JACOB BELL SCHOLARSHIPS AND REDWOOD SCHOLARSHIP, 1888.

EXAMINATION HELD ON TUESDAY.

FIRST PAPER.

(*Time allowed: Three hours*—11 *to* 2.)

LATIN.

1. Translate into English:—

Hic ubi delati portus intravimus, ecce
Læta boum passim campis armenta videmus
Caprigenumque pecus, nullo custode, per herbas.
Irruimus ferro, et divos ipsumque vocamus
In partem prædamque Jovem, tum litore curvo
Exstruimus toros, dapibusque epulamur opimis.
At subitæ horrifico lapsu de montibus adsunt
Harpyiæ, et magnis quatiunt clangoribus alas:
Diripiunt dapes, contactuque omnia fœdant
Immundo; tum vox tetrum dira inter odorem.
Rursum in secessu longo sub rupe cavata,
Arboribus clausi circum atque horrentibus umbris
Instruimus mensas, arisque reponimus ignem.

"Æneid," Lib. iii., 219–231.

2. Parse *delati*; give part of *irruimus*; give an account of *dapibus* and decline the word; give infinitive, perfect, and supine of *quatiunt* and *instruimus*; parse *clausi*; why does *sub* govern the ablative case *rupe*? decline *rupes*.
3. Translate into Latin:—
"Take of citrate of iron and quinine, one and a half drachms; of spirits of chloroform, one drachm; of tincture of orange, half an ounce; of water, to eight ounces. Two tablespoonfuls to be taken twice a day in the same quantity of water, two hours after meals."
"The plaster, to be applied in the neighbourhood of the heart."
"One pill at midday, and one at bedtime."

ENGLISH.

Write a short essay on "The Battle of Waterloo" or on "A Country Walk in Spring."

Explain and illustrate by a different mode of expression the use and varying meanings of "shall" and "will" in the following sentences:—"I shall fall." "You shall not go." "I will come presently." "I will not carry out your orders."

ARITHMETIC.

1. How many cubic centimetres are there in one and a half imperial pints, the gallon being taken as 277 cubic inches and the centimetre as 0·3937 linear inch?
2. A man buys 1 cwt. 3 qrs. 9 lbs. of an article at 1*l.* 5*s.* 9*d.* per cwt., how much does it cost him, and what will be his profit on the whole if he sells it at $4\frac{1}{2}$*d.* per lb.?
3. Add $\frac{24}{45}$ to $\frac{67}{117}$, and multiply the sum by $5\frac{29}{67}$. Express the result as a decimal to the fifth place.
4. If 27 men can cut a tunnel in 45 days 6 hours, working 8 hours a day, how long will it take 38 men to do so, working $6\frac{1}{2}$ hours a day?

FRENCH OR GERMAN.

The candidate is at liberty to choose either French or German, and is not required to show a knowledge of both.

FRENCH.

Translate into English:—

Cependant il arriva que le marchand perdit toute sa fortune, et il ne lui resta qu'une petite maison de campagne, bien loin de la ville. Il dit pleurant à ses enfants qu'il fallait aller demeurer dans cette maison, et qu'en travaillant comme des paysans ils pourraient y vivre.

Ses deux filles aînées répondirent qu'elles ne voulaient pas quitter la ville; qu'elles y avaient plusieurs admirateurs, qui

seraient trop heureux de les épouser quoiqu'elles n'eussent plus de fortune. Les bonnes demoiselles se trompaient; ces messieurs ne voulurent plus les regarder quand elles furent pauvres. Comme personne ne les aimait à cause de leur fierté on disait, "Elles ne méritent pas qu'on les plaigne; nous sommes bien aisés de voir leur orgeuil abaissé; qu'elles aillent faire les grandes dames en gardant les moutons."

Contes de Fées. "La Belle et la Bête."

GERMAN.

Translate into English :—

MARSILIUS, ODER DIE HOLZFAHRT.

Zur Zeit als die Römer an den Ufern des Rheines herrschten, war Köln von einem römischen Kaiser belagert. Marsilius, der Stadthalter von Köln, ein sehr kluger und gewandter Mann, suchte, da er es mit Gewalt nicht konnte, die Stadt durch List zu retten. Auf seinen Befehl mussten sich alle Frauen herwaffnen, und mit Karren zur Stadt hinausziehen, als wenn sie im nachgelegenen Walde Holz zu fällen gedächten. Dieser Auschlag wurde ausgeführt, und kaum hatten sich die Frauen mit ihren Karren im Felde gezeigt, als das Heer der Belageren ihnen gleich nachsetzte, um sie zu fangen oder niederzumachen. Jetzt eilten die übrigen Bürger Köln's, Marsilius an ihrer Spitze, am entgegengesetzten Thore hinaus, und fielen dem Feinde in dem Rücken; der jetzt von beiden Seiten hart angegriffen wurde, den auch die Frauen hatten sich tapfer zur Wehre gesetzt.

Die Belagerer wurden in die Flucht getrieben, und selbst der Kaiser gefangen in die Stadt geführt.

"Legends and Tales of Köln," 1826.

SECOND PAPER.

(*Time allowed : Two hours*—3 *to* 5)

CHEMISTRY AND PHARMACY.

1. State the composition by volume of the following gases :—Hydrochloric acid, water, ammonia, and marsh gas; and the relative volume weight of each. Hydrogen = 1.

2. Expand fully the information conveyed by each of the following formulæ :—HI, H_2S, PH_3, CCl_4.

3. Name the materials you would employ, and the quantities necessary to obtain 1,000 litres respectively of hydrogen, oxygen, and nitrous oxide, at standard temperature and pressure, expressing by an equation the reaction taking place in each case.

4. Describe and explain the B.P. process for the formation of lead plaster, and name those plasters into the composition of which it enters.

5. How much liquid extract of cinchona can be prepared by the official process from 10 lbs. of bark, containing 6 per cent. total alkaloids.

BOTANY.

1. Describe the chief modes of cell formation, indicating that which is of the most common occurrence.

2. Define a "mixed" inflorescence, cyme, and verticillaster, and show how a cone differs from a strobile.

THE WORCESTER POISONING CASE.—Mr. Justice Denman has sentenced both the accused in this case to 12 years' penal servitude.

TREASURE TROVE.—A small fortune was picked up at Marblehead Neck, Massachusetts, by a young man the other day. He found a peculiar substance floating on the sea, and having brought it to shore showed it about, with the result that it was discovered to be a genuine lump of ambergris, valued at 650*l*.

TINCTURE OF MYRRH AND BORAX.—This preparation contains free boric acid, which is probably liberated through the action of the myrrh. The presence of free boric acid may also be accounted for by the fact that some formulæ contain glycerine, which liberates boric acid from borax, as do also other polyhydric alcohols. We have from this a reason for adding borax, namely, the antiseptic and healing properties of boric acid. Try, instead of borax, the effect of 6 grs. of boric acid to the ounce of the tincture.

Gazette.

PARTNERSHIPS DISSOLVED.

Fernie & Gale, Stone, Staffordshire, surgeons and apothecaries.

Gostling & Co., Diss and Pulham, Norfolk, chemists and druggists, compounders and vendors of proprietary medicines, and dealers in oils, and manufacturers of aërated waters; as far as regards E. A. Thrower.

Heginbotham & Harrison, Stockport, surgeons and apothecaries.

Miller & Barrow, Basingstoke, general medical practitioners; as far as regards C. A. G. Barrow.

Waller & Goodman, Richmond Road, Caledonian Road, Islington surgeons.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Cook, Augustus, Eastbourne, dental surgeon.

Dards, Joseph, Old Kent Road and London Road, mineral water manufacturer.

Elsworth, Francis, Kingston-upon-Hull, commission agent, formerly varnish manufacturer.

England, John, Higher Broughton, Salford, mineral water manufacturer.

FIRST MEETING AND PUBLIC EXAMINATION.

Cook, Augustus, Eastbourne, dental surgeon—July 17, Messrs. Coles & Carr's, Seaside Road, Eastbourne; Aug. 16, Town Hall, Eastbourne.

ADJUDICATIONS.

Cook, Augustus, Eastbourne, dental surgeon.

Elsworth, Francis, Kingston-upon-Hull, commission agent, formerly varnish manufacturer.

England, John, Higher Broughton, Salford, mineral water manufacturer.

Holmes, John Henry, Colwyn, Carnarvonshire, and Colwyn Bay, Denbighshire, pharmaceutical chemist and druggist.

NOTICES OF DIVIDENDS.

Leith, John (separate estate) (trading with W. Lockwood), St. Helen's, chemical manufacturer—first and final div. of 20*s*., July 16, Mr. G. Nicholson's, 24 North John Street, Liverpool.

Lockwood, William, & Leith, John, St. Helen's, chemical manufacturers—first and final div. of 7*s*. 6*d*., July 16, Mr. G. Nicholson's, 24 North John Street, Liverpool.

APPLICATION FOR DEBTOR'S DISCHARGE.

Power, Henry D'Arcy, East Dulwich Road, Victoria Road, Choumert Road, Peckham, and Rye Lane, Peckham, physician and accoucheur—Aug. 9, High Court of Justice in Bankruptcy.

DECLARATION OF DIVIDEND.

Roper, T. (under the style of Thomas Roper & Co.), Falcon Square, City, wholesale druggist, dealer, and chapman—fourth div. of 7¾*d*., and 5*s*. 5¼*d*. on new proofs, any day until Dec. 31, Saturdays excepted, Official Assignee's department, 34 Lincoln's Inn Fields.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Carruthers, David (trading with J. Pickover, as Pickover & Co.), Burnley, drysalter—discharge suspended for one day.

PARLIAMENTARY NEWS.

THE IRISH PHARMACY BILL.

IT would be noticed from our reports last week that the Earl of Powis did not further prosecute his objections to the new 13th clause of the Bill, which requires a notification on the outside of every registered druggist's shop to the effect that the owner is not licensed to dispense medical prescriptions. The reason for the abortive action on the part of Lord Powis is that the Earl of Milltown had a consultation with Lord Powis, in the course of which he induced him to abandon his opposition to the clause.

PROSECUTIONS UNDER THE PHARMACY ACTS.

Doctors' Shops: Important Decision.

On Monday the case of Richard Bremridge (acting on behalf of the Pharmaceutical Society) *v.* Robert Alexander Wright, for an infringement of the 1st and 15th sections of the Pharmacy Act, 1868, was heard before Sheriff Birnie, in the Sheriff Court, Hamilton, N.B.

Mr. T. Shaw, advocate, Edinburgh, instructed by Mr. P. Morison, S.S.C., Edinburgh, and W. R. Archibald, writer, Hamilton, prosecuted. The defence was conducted by Mr. W. T. Hay, of Messrs. W. T. Hay & Cassels, writers, Hamilton.

Before pleading Mr. Hay took several technical objections to the complaint, which were repelled, and respondent pleaded not guilty.

Evidence for the Prosecution.

Richard Bremridge, the prosecutor, examined by Mr. Shaw, deposed: I am secretary and registrar to the Pharmaceutical Society of Great Britain. Under the 12th section of the Pharmacy Act of 1852, I was appointed prosecutor for offences under the Act, and I exercise the duties conferred upon me by that statute, and also by the Act of 1868. I am aware of the case of the accused. He applied for registration as a chemist and druggist in August, 1885, making a declaration that he had been in business——

Mr. Hay: I object to any particulars as to what declaration was made. We are not here on a charge as to registration.

Mr. Shaw: That is perfectly true. Is he still on the register?—No. His name was deleted from it in March last. The Council of the Society had to exercise their powers under the 12th section of the Act of 1868, and ordered the erasure of his name from the register. This was done at a meeting on March 7, at which I was present, and heard the discussion. I produce the minute-book and also the written order of the Council. Following on that I wrote respondent on March 8, intimating the action of the Council, and informing him that he would be proceeded against if he continued to carry on business as a chemist and druggist, or used any name implying that he was registered under the Act. I subsequently ascertained that he was carrying on business notwithstanding and by order of the Council the present proceedings were taken. On April 3 I received by post from Mr. Hill, assistant secretary for the Society in Scotland, a letter dated April 2, and a package bearing Wright's name, and labelled "Oxalic Acid—Poison," and designing him a family and dispensing chemist. The label was destroyed.

Mr. Hay objected that the label ought to have been produced, but his objection was overruled.

Cross-examined by Mr. Hay: Can you tell me if Mr. Robert M'Kill, jun., Mr. William M'Kill, and Mr. William Hamilton, all of Hamilton, are on the register of chemists?—I cannot tell you that without notice.

You know as a matter of fact if they are or not?

Mr. Shaw: Suppose they are, I should object to the question. Though other parties were guilty, it appeared to him it could not have the remotest effect on the guilt or otherwise of the accused in the present case.

The Sheriff: Do I understand that Mr. Wright's name was put off because the Council were dissatisfied with his qualification?

Mr. Hay: That is so.

Mr. Shaw: That is not so. He was struck off the register because he had obtained registration by fraud, and it was so proved to the satisfaction of the Council.

Mr. Hay: I think it is scarcely fair to the accused for that to be put. They were not there on a charge of fraud, and he demurred to it going forth to the public, as now it would, that Mr. Wright's registration was procured by fraud. He was not being tried for that, and accordingly he had no rebutting evidence as to how he got on at all. What they had to do with was that on March 7 he was put off the register. That he was prepared to admit, but, as he had said, he was not prepared to go into an inquiry on a point on which he had got no notice.

Mr. Shaw said he had acted very gently by the accused, because the Council had not exercised their powers under the second part of the section, when it was proved to them that the entry was fraudulently or incorrectly made.

Mr. Hay: That it was incorrectly made, I admit; but that it was done fraudulently, I demur to.

Mr. Shaw: Mr. Hay has brought out what I did not bring out at all.

Mr. Hay: I didn't. It was the Court.

Mr. Shaw: And it is now proved that it was fraudulently entered.

The Sheriff: I understand Mr. Wright's name was deleted under section 12 by the Council of the Society, and your question, Mr. Hay, is this—Whether certain other gentlemen's names are on the register? I assume you are to follow that up by showing that they are in the same position as Mr. Wright?

Mr. Hay: I am to go a step farther. I am to endeavour to prove that, where there is a duly registered person, or a person who is a creature of statute, and does not require to be registered, and who has a shop, it is the universal practice for that person to employ both registered and unregistered assistants, each and all of whom dispense poison. That is to say, where you have a shop with a duly qualified head, it is not necessary that the man in that shop who is to dispense poisons should be registered.

The Sheriff: I quite follow. Don't you think that you could get your answer without bringing in other gentlemen's names?

Mr. Hay: I think not; and I purpose putting these parties in the witness-box.

The Sheriff: You might do that, too, without asking Mr. Bremridge. He might have a natural disinclination to deal with other people.

Mr. Hay: You must keep in view that whatever Mr. Bremridge is in reality he is *ex facie* the prosecutor, and he is bound to give me, I take it, any information which is in his power, unless he can show very strong reason for withholding it. I have not the slightest doubt Mr. Bremridge knows thoroughly whether these gentlemen are on the register or not. If he says he does not know, I can press it no further. There is an end of it, so far as he is concerned.

Mr. Shaw: I still fail to see what is the relevancy of this. Mr. Hay was going to prove that there was a practice to the effect that if somebody had a right under the statute and employed somebody else who had no right to sell poisons, then a person who was not qualified to sell but did so was entitled to escape on account of a proved practice. He was going to submit that if there was a proved practice, the sooner they commenced their prosecutions the better. The point was as to the construction of section 15, and he submitted that no amount of proof of practice would elucidate what the statute meant.

The Sheriff (to Mr. Hay): I think you will get your point otherwise.

Cross-examination continued: You know that the first fifteen sections of the Act of 1868 do not apply to medical men qualified before the passing of the Act. Is that so?—Yes.

Do you know that prior to 1868 medical men were in the habit of keeping a doctor's shop and dispensing poisons?—No doubt.

And they were also in the habit of employing as assistants non-registered persons?—I presume so.

Do you know that it is at the present day the practice for either medical men keeping a shop or registered chemists keeping a shop to employ non-registered assistants?—Yes.

That of course is necessary because they require to be a certain time as assistants before they can qualify for registration?—Yes.

Do you know that these assistants are in the habit of selling poison?—I should imagine that they should not do so unless under the supervision of a qualified man.

Do you know as matter of fact that they do sell small quantities of poison?—I know it as common knowledge.

And no prosecution followed on the carrying out of that practice?—I cannot say that.

Do you prosecute where you find the unregistered assistants of a registered chemist selling, we shall say, 1*d.* or 2*d.* worth of laudanum?—Not yet.

And you have been registrar for how long?—Four years.

And I suppose you know of hundreds, possibly thousands, of cases in which these small quantities are sold by un-

registered assistants?—I cannot say. I should think that the common practice is for an unqualified person to dispense under a qualified man. That is the theory at least.

Do you know, as matter of fact, that it is frequently done?—No, I do not.

Now, you say that Mr. Wright's name was deleted from this register. Might I inquire who drew your attention to the desirability of erasing his name?—I should ask the Court to excuse my not answering the question. We would never be able to take up any case at all if we told that.

Mr. Hay (addressing the Sheriff) said perhaps he should point out what his question consisted of. It was simply this: he believed, or at least he hoped, he should be able to prove, before he was done, that this case, while nominally in name of Mr. Bremridge, who, of course, when a matter was brought to his notice was bound to prosecute, was in reality the work and at the instigation of a rival druggist in town.

The Sheriff: Suppose it is, what has that to do with the prosecution?

Mr. Hay: It simply comes to this: I believe I will bring out facts that will justify your lordship in holding that if a conviction follows it would be a perfect travesty of justice. I shall endeavour to prove that this man who was the prosecutor was a man who offended day and date.

The Sheriff ruled that Mr. Hay's question was incompetent.

Cross-examination continued: I ask this further question: Who informed you, after the deletion of his name, that the accused was selling poisons?—I instructed my assistant, Mr. Hill, to ascertain whether he was or not.

Do you know how he got his information?—I cannot tell you really. I did not expect to have the decision of the Council challenged.

Re-examined by Mr. Shaw: Following my instructions, Mr. Hill came to Hamilton and spoke to the accused. There are clearly many prosecutions under the statute in the interests of the public.

And in a case where there was no personal supervision at the time of a sale of poisons, it would be your duty, and according to your practice, to prosecute in the interests of the public?—I imagine it would be. I would be subject to the order of the Council.

Are you aware of your own knowledge of any such practice as that suggested, that people without any qualification do, in fact, sell poisons?—No; I should imagine they don't, unless under the supervision of qualified men. That is in accordance with my experience.

Mr. Hay: I think your lordship has it that Mr. Bremridge has never prosecuted before for the sale of 1*d.* or 2*d.* worth of laudanum?

Witness: I have not said so. We have had very many prosecutions for selling 1*d.* and 2*d.* worth of laudanum.

The Sheriff: The question was—Suppose a qualified person in a shop with an unqualified assistant, and the unqualified assistant sold 1*d.* or 2*d.* worth of laudanum without showing it to the qualified person, have you prosecuted in such a case?—Yes, my lord; that is the answer that I gave.

Mr. Shaw: You have never had such a complaint and such case?—No; I never remember such a case coming before me.

You have had, however, complaints of sales by an unqualified person who was not under the supervision of a medical or qualified person?—Yes.

And obtained a conviction?—Yes.

Mr. Hay: I don't know if that is relevant.

Mr. Shaw: And that was for selling 1*d.* worth of laudanum?—Yes.

Mr. Hay: I understand your lordship to rule that that is not relevant.

The Sheriff: I think I have taken it down in a way that won't be objected to.

John Rutherford Hill, assistant-secretary to the Pharmaceutical Society in Scotland, examined by Mr. Shaw, deponed:—In the beginning of the year I had instructions from London to make inquiries regarding respondent, and I was informed by last witness that his name was, after certain proceedings, erased from the register at a meeting of the Council in March. On March 9 I received a letter intimating the erasure of the name, and asking me to ascertain if Wright had ceased to carry on business as a chemist and druggist before next meeting of the Council, and to report. In consequence of that I visited Hamilton on April 2, and went straight to Wright's shop. I found him there, and asked him if he was Mr. Wright. He said "Yes." I then asked him if this business was his. He said "No," that it had been transferred. I did not at this stage tell him who I was. A little farther on I did. I asked him whom it had been transferred to. First of all he said to the Hamilton Apothecaries' Company, and on my asking for the names of the shareholders he said the sole shareholder was Dr. Lennox, Auchinarden. In reply to my question where I could see the doctor, he said he was from home, and would not be home for some little time; and as I could not wait I did not call and did not see him. He gave me the name of the proprietrix, and told me she was down the Clyde. I had told him by this time that I was the secretary of the Society for Scotland, and asked him if his name appeared anywhere in connection with the business. He said "No." I drew his attention to several bottles on the counter having his name on them, and also the words "dispensing and family chemist," and asked him for an explanation. He did not seem to be able to give any proper explanation. He showed me another label which he said he was now using, and which was inscribed "Hamilton Apothecaries' Company." In consequence of what I saw and heard, I found it my duty to watch his operations, and after leaving Mr. Wright's shop I went to Mr. M'Kill's, who is a chemist and druggist just a few doors from Mr. Wright's shop. I got him to send a boy for some oxalic acid. I did not see the boy despatched. I had some other business, and, on returning, Mr. M'Kill gave me the packet of oxalic acid which had been purchased by the boy. There was a label on it, "Robert A. Wright, dispensing and family chemist — oxalic acid — poison — 38 Cadzow Street, Hamilton." I analysed the package, and found it to be what it represented. Oxalic acid is a very dangerous poison. On the same night I sent the package to Mr. Bremridge, and thereafter I received instructions from the Council to prosecute. Respondent was the only person in the shop when I called, and it was an open shop. I received intimation that Mr. M'Kill had sent other messengers to procure other purchases of poison, and on May 8 I received from him a bottle containing laudanum. (Bottle produced.) It is labelled "Robert A. Wright, family and dispensing chemist —laudanum—poison—medium dose, 25 drops." On June 14 I got another bottle containing laudanum. (Bottle produced.) The label is, "Hamilton Apothecaries' Coy., 38 Cadzow Street —laudanum—poison—medium dose, 25 drops." The bottle was handed to me by Mr. Morrison, S.S.C., as agent for the Society in Scotland. Laudanum is a preparation of opium, and opium is a poison within the meaning of the Act, and also oxalic acid.

Cross-examined by Mr. Hay: I am a pharmaceutical chemist. (Shown one of the laudanum bottles.) I see that the label is pasted over another label.

Do you notice that the upper portion is clean, and that the lower is black and dirty?—I cannot say I notice much difference. The upper portion is cleaner than the lower portion. On the other bottle the name seems to have been cut off, and a slip pasted above.

Does it not seem as if there had been a similar label on the first of these?—I should not think so. That is the condition in which I got it. I cannot speak to the condition on which it was originally got. It is quite common for registered chemists to have assistants not registered. I should think it occurs in every chemist's shop.

Do you know it to be the practice that these unregistered assistants dispense small quantities of poison, such as 1*d.* or 2*d.* worth of laudanum?—Oh, yes, I should think they do.

And I suppose that practice obtains universally?—I couldn't speak to that. I know it to be a very common practice.

And you would not think of reporting a case of that kind with the view of prosecution?—I report no cases unless what are reported to me.

Would you consider that a fit case for a prosecution?—Well, that is a matter of opinion on which I would not like to make any statement. I do not decide.

Re-examined by Mr. Shaw: I know in practice that unregistered or unqualified assistants do not sell without the supervision of qualified men—I mean the presence of qualified chemists—and that a qualified man was present when the 1*d.* or 2*d.* worth of laudanum was being sold.

I do not know of any case without the qualified man being there at the time of sale.

Mr. Hay: I am afraid, Mr. Hill, your knowledge is limited.

Peter Morison, S.S.C., Edinburgh, agent for the Pharmaceutical Society, spoke to receiving by post on June 14 a bottle containing laudanum labelled "Hamilton Apothecaries' Coy.," and to handing the same to last witness in the same state as he found it.

Robert C. M'Kill, chemist and druggist, Cadzow Street, deposed to having at the request of Mr. Hill sent Michael Rafferty (a witness) for one pennyworth of oxalic acid, which he handed to Mr. Hill. On May 4 he also sent William Moore to Wright's shop for one pennyworth of laudanum, and on June 13 he sent James Cairns for another one pennyworth of laudanum. The laudanum was obtained on both occasions, and he sent the first pennyworth to Mr. Hill. It was first handed in to Mr. Archibald, the local agent for the Society. He got it back from him some day or two afterwards. In April the sign above Mr. Wright's premises was "Robert A. Wright," with "chemist" on the one side and "druggist" on the other. The sign was rubbed out, and remained blank for a time. The "Hamilton Apothecaries' Hall" was put up. The two-leaved glass door in the front had "dispensing" on the one side, and "chemist" on the other. Witness denied that he gave information which led to Mr. Wright's name being taken off the register, nor did his sons do so. Dr. Lennox until recently had his dispensing rooms with him, but he was not in partnership as a chemist with him in 1853 or thereabouts. There was no co-partnery between them. Asked if he had two shops in Hamilton, and if his two sons and a son-in-law (all unqualified) assisted him in the management—

Mr. Shaw objected to the question, and the Sheriff said he did not think Mr. Hay could ask it.

Mr. Hay: You are seldom or never in the New Cross shop?—Three times a day.

For short intervals?

Mr. Shaw objected to the question.

Mr. Hay: Do these gentlemen dispense poisons in your absence?

The Sheriff: It is the interpretation of this Act we have to do with.

Mr. Hay pressed the Court very strongly to allow this class of evidence. He had a large body of it of a most respectable and conclusive kind to show that this was the unavoidable practice, and he thought he had laid a good foundation for it out of the mouth of the prosecutor.

The Sheriff: Assuming this is the practice, would that relieve me from interpreting the section?

Mr. Hay: I think it would. It would show what was the interpretation put on it by the persons interested.

Mr. Shaw: It will simply begin this kind of proceeding, and compel the Society to take proceedings.

Mr. Hay: This is a case where the most invidious distinctions are being made against this poor man for the purpose of driving him out of Hamilton.

Mr. Shaw: That is the opinion of all law-breakers with regard to the law.

Mr. Hay: Possibly.

The Sheriff could not imagine a case proved by this class of evidence.

Mr. Hay: I say this old gentleman is the instigator of the whole of this, and I think one question I will put to him will go a long way to satisfy your lordship that it is so.

The Sheriff: Let us settle this question first.

The cross-examination was then continued. Witness did not remove the slip label from the bottle bearing the new name over Wright's in order to get a conviction. He admitted that he had an ill-feeling against Wright.

Mr. Hay then put questions as to witness's sons being on the register and selling poisons, but they were objected to, and the objections sustained. The examination was then directed to show that it is the custom for unqualified assistants to dispense small quantities of poisons. The Sheriff remarked that this was a point he would like to know, and Mr. Shaw did not object. An endeavour to show that this was witness's custom was objected to, and the objection sustained. Witness was then examined as to Dr. Lennox's position regarding Wright's shop, and the forwarding of the laudanum to Mr. Hill.

William More (13), James Cairns, and Michael Rafferty (14) proved purchase of the oxalic acid and the laudanum.

This closed the prosecutor's case.

Evidence for the Defendant.

William W. McIndoe, law clerk, examined by Mr. Hay: On the 4th of this month I was along with Lewis Shearen, law clerk, in Mr. M'Kill's shop, at New Cross, when he purchased some laudanum.

The Sheriff: Pardon me. What is this for?

Mr. Hay: To show the practice.

The Sheriff (to Mr. Shaw): Do you object?

Mr. Shaw: Certainly.

The Sheriff: Objection sustained.

William M'Kill (son of Mr. R. C. M'Kill, a former witness), examined by Mr. Hay: I am not a registered chemist.

Do you assist your father in his shop at New Cross?

Mr. Shaw objected to the line of examination.

The Sheriff: You will better let that question pass.

Witness answered in the affirmative.

Mr. Hay: Do you sell small quantities of poison?

Mr. Shaw again objected.

Mr. Hay, at some length, contended that it was not reasonable for his friend to object because the witness would say something to incriminate himself, and he (the prosecutor) did not wish to proceed against him. He stated, further, that in selecting respondent for prosecution he had made an invidious distinction at the instigation of Mr. M'Kill.

Mr. Shaw replied. He trusted it would not be insisted on that there was anything like unfairness in the prosecution, and stated that Mr. M'Kill had no more to do with its instigation than the man in the moon. He had only been appealed to as one loyal to the Society in the locality.

The Sheriff sustained the objection; and Mr. Hay having tendered Robert M'Kill, jun., to speak to the same point, he was similarly dealt with.

Thomas Brodie, partner of the firm of Brown Brothers, chemists, Glasgow, examined by Mr. Hay, deposed that he had known Mr. Wright for upwards of a dozen years. He was regularly trained and had large experience, having managed chemists' businesses before he came to Hamilton. His firm supplied him with goods till the beginning of March, when his name was put off the register. He informed him that Dr. Lennox had taken over the business and closed his account. Financially he was owing his firm a little money, and he said he was very sorry.

Is it the practice in Glasgow for registered chemists to have unregistered assistants dispensing small quantities of poison?

Mr. Shaw objected that this was the same question.

The Sheriff: There is no doubt this is the same question.

Mr. Hay: That is the essence of my case.

Mr. Shaw: Really there is something due to the Court.

The Sheriff sustained the objection.

Mr. Hay: I may put another question. Would the effect of a finding that non-registered assistants could not dispense small quantities of poison be to close the half of the druggists' shops in Glasgow?—I should say not only the half but three-fourths of them.

Mr. Shaw: Your lordship understands that this is also objected to.

Mr. Hay: And this is what is called a fair prosecution.

Cross-examined by Mr. Shaw: I think it was in March that Mr. Wright closed his account with us. I cannot give the date. We do not supply Dr. Lennox.

Hugh Thomson, traveller to James Taylor, wholesale chemist, Glasgow, gave similar evidence.

Dr. Lennox, Hamilton, examined by Mr. Hay, deposed that he had been connected with the medical profession for sixty years. His diploma was dated 1838. Before 1868 it was the practice for doctors to keep a druggist's shop. There was the ordinary doctor's shop, which most young men had when they started practice. Everything was done in it connected with the sale of drugs, including the dispensing of poisons. Certainly their assistants were unregistered. There was no registration in those days at all. He had served a regular apprenticeship in a doctor's shop, where there was a large drug business. He considered he was still entitled to keep a shop with unqualified assistants. He could put his housemaid behind the counter if he chose, and nobody dared

say nay. When Mr. Wright started business he assisted him.

Witness was then examined in regard to his relations with Mr. M'Kill. He considered that Mr. Wright's shop would be good to fall back upon, and it was for that reason, amongst others, that he assisted him. He knew about the correspondence between Wright and the Pharmaceutical Society, and when his name was removed, he came to the conclusion that he must take the shop over, and he did so as from March 1, although he could not remove his consulting room there until May 28. He had some delicacy about putting up his own name, and so he and Wright agreed to put np "Apothecaries' Company." Since March 1 Wright had been his dispenser. If he had not acted as he had done "poor Wright would have been ruined." Prior to 1868 witness had a shop of his own, and was in partnership with a chemist and druggist.

Cross-examined by Mr. Shaw: Witness could not give the date when his name was placed on the valuation roll instead of Wright's. He had not gone to the premises until May 28, but they were his nevertheless. He did not consider it necessary that he should superintend the shop, and he did not do so. It was entirely left to Wright's management, but he (witness) was responsible. If anything had gone wrong in the shop Wright was criminally and witness was pecuniarily responsible.

Mr. Shaw: Do you consider it a safe thing, Doctor—to take your own instance—to allow a housemaid to dispense medicines without supervision?—If the housemaid is a clever woman, I think she is quite safe. Women dispense very frequently.

You would consider it perfectly consistent with safety to the public to allow her to dispense medicines?—I did not say so. I said I was at liberty to put my housemaid behind the counter if I thought fit.

I know you said you were at liberty, but do you think you were safe?—I think if a woman was instructed she would be perfectly safe.

Instructed in medicine?—Yes, in drugs.

She would require, in fact, to be a skilled druggist?—Not at all.

A qualified druggist?—Yes.

Suppose she was not a qualified druggist?—Well, I would take the risk. I did not say I would, but I say I am entitled.

You say you are at liberty, and my question is—Do you think it safe?—No, I do not think, perhaps, it would be safe.

At this point there was a little battling between Mr. Shaw and witness in regard to his having a shop before 1868, and witness contradicted himself, but finished up by admitting that he could not say he had had a shop since the passing of the Act. In re-examination witness said that Wright was a thoroughly competent man.

Mr. Shaw afterwards addressed the Sheriff at considerable length for a conviction, and Mr. Hay claimed for his client an acquittal.

The Sheriff: This complaint is divided into five branches, but it really amounts to three. The first is that the respondent, not being qualified, sold poison; the second that he kept open shop; and the third that he took the title of chemist. I do not think that I can convict on either of the two last. I think this respondent with all reasonable haste did make over this business to Dr. Lennox, and although he may have had a few bottles in the window, or may not have got his name rubbed out of the door next day, that does not seem to me to incur the penalties under the Act. It has been said Dr. Lennox, or the Hamilton Apothecaries Company, is not entitled to take the name of chemist either. All I need say as to that is that neither Dr. Lennox nor the Hamilton Apothecaries Company is a respondent in this complaint. The real point is whether a qualified gentleman can employ an unqualified assistant, and that depends upon the Act of 1868. The 15th section may be taken—it is the same as the first, and it runs—"From and after the 31st day of December, any person who shall sell or keep an open shop" and "shall not be qualified, shall for every such offence be liable to a penalty." The respondent reads this, that it is sufficient if there is a qualified gentleman pecuniarily responsible. I cannot concur in that. I think the object of the Act is the protection of the pnblic, and that the protection of the public would not be served by such a reading. My opinion is that the words "who shall sell" are disjoined from the words "who shall keep an open shop," and that there are two distinct offences. I therefore think that the respondent may be liable. I am not at all alarmed at the remarks of some of the witnesses, if this reading is correct, it will shut two-thirds of the chemists' shops. It will not shut a single shop in Hamilton and Glasgow. It simply means that there must be a qualified person for the protection of the public, having what has been called the supervision of a chemist's shop. That you may have numbers of unqualified persons is very probable, and that in practice you may have them occasionally acting on the general orders of their master, dispensing a small quantity of poisons in the absence of their master, is also probable; but I have not the slightest doubt of this, that as laid down by Lord Selborne in the English case quoted, the protection of the public demands that every chemist's shop shall be under the immediate and reasonable supervision of a qualified person. Now Mr. Wright ceased to be a qualified person in March. I do not lay stress on the fact that Dr. Lennox thought it right—to fulfil his honourable bargain—to keep his consulting-room in the old shop until May 28. My opinion rests on the broader grounds that a gentleman in Dr. Lennox's position, who cannot possibly be in the shop except on very rare occasions, must have a qualified assistant in that shop.

Mr. Hay: Would your Lordship take into account the Act of 1869?

The Sheriff: I am reminded of the Act of 1869. The Act of 1869, according to Mr. Hay's argument, is this, that if the shop had been merely in the position of an ordinary chemist's shop, you must have had a qualified assistant, but that a gentleman who is a doctor, and who was a doctor previous to the Act of 1868, and who had a right before that Act to have a shop, and to dispense through an unqualified assistant, has that right still. That depends on the reading of the section of the Act of 1869, which says that nothing contained in the first fifteen sections of the preceding Act shall affect any person who has been registered as a regular qualified practitioner before the passing of this Act. There are two readings of that section, viz., that a regular qualified practitioner prior to the Act shall be entitled to sell and keep open shop; the other is that he may not keep a qualified assistant. I think the only reasonable reading is the first. I cannot think they are entitled to lay the risk on the public of having an unqualified assistant, although they cannot supervise themselves. The result is that the respondent is technically liable, but I am satisfied there has been a misunderstanding as to this point. I do not think it is a case for an extreme penalty. I do not think it is a case for a penalty at all. I think it will serve the end of the prosecution without a penalty, and I dismiss the respondent with an admonition.

A charge against Wm. Cassels, an occasional assistant in Mr. Wright's shop, was not proceeded with.

Using the Title "Wholesale Druggist."

At the Leeds County Court on Wednesday, Judge Greenhow on the Bench, Mr. D. E. Noble, trading as a druggist at Meanwood Road, Leeds, was summoned at the instance of the Pharmaceutical Society for infringement of the Pharmacy Act, 1868, he having used the title "druggist," although not a registered chemist and druggist.

Evidence on behalf of the prosecution showed that his shop sign bore his own name and the words "wholesale druggist," and that his labels and handbills had the same printed upon them.

For the defence, Mr. Dunn contended that his client had only done what many large firms, the partners of which were unqualified, do. It was quite a common practice.

Judge Greenhow considered, nevertheless, that it was a practice which should not be common, and found for the plaintiffs with the full penalty of 5*l*.

Chloroform, it is well known, is much more soluble in cold than in hot water. A litre of water at 0° C. dissolves 9·87 grains, but water at 54·9° C. dissolves only 7·75 grains of the anæsthetic.

PHONETIC PHARMACY.

POST-CARD COMPETITION—No. 6.

OVER two hundred correspondents have been good enough to respond to our request for specimens of the way in which the Queen's English, or rather what may be called the Galenical portion of it, can be murdered. We confess to experiencing a sense of guilt as we read the tortuous efforts on the two or three hundred post-cards which this competition has called forth. Many competitors have kindly appended translations of their verses, for which we have felt grateful; but we cannot afford space to give these generally, and must leave readers to hunt for the meaning hidden in the lines, if they think it worth the trouble.

"*Oakum* at once to *Hæmatox*,
She's *ferri* nearly dying;"
I went, but found that *scillæ* fox
Sambuci had been lying.
SODA CARE.

By renging the *bole* you'll get rid of the gout,
Yet you *still succupiticusly* do it,
If you *aloes* will be *galla*-vanting about,
The *thymol* come when you will *rue* it.
H. HERBERT, 49 Gt. James Street, Lissou Grove.

Canella caryoph and steal the *ferri tar'*
Sal's sacin with the *glycerin* till she and *Ethydine?*
Let *granati* her hands, and ℈ not the while,
Her warrant *æther piper long* or I or *salici ne*.
E. WALES, Heuisworth.

To the a *salt* his meu *borax* and *mace*;
They *clove* and *pepper*'d all the *mustard* race;
Sage Kernel Cubebs pitch'd his *castor* high;
The *piper* played the spicy tune of "*Cumin* thro' the *Rye*."
R. E. BROWN, 9 Guildford Road, Brighton.

Sam-Buci was a tippler true,
Such another has ne'er *benzine*;
He'd *caryoph* for a *nitre* two,
The effects of *lupuline*.
C. S. KITTLE, Horsham.

Pat *Turpen* went *to-Lu*, and said,
"You want *morphia* in your eye;"
She *soda* seam, then tossed her head,
And answered, "*Patchouli*."
THORPE, Earl's Barton.

In *palmæ* days long years gone by,
Syrupus was a knight,
Borax and shield in many a fray,
Anchusæ what was right.
A. J. H. M.

Nay, do not call a *manna* fool, you need have no *morphia*,
The *mori* urge the more you seem to laugh at me, my dear;
Do let me *caryoph* my prize; my love, I *camphor* thee.
Sal-ol leered back this *scillæ* phrase, "If ma may *c.* with me.
LONDINENSIS.

Scillæ Salis always *siccat thus mel ova piper bacca*;[1]
If *alumen* who are *cumin cudbear* this fact in mind,
You *thus* could keep *pur Sal-in-a* proper form to *masher*,
For sh-*Eno's shellacs aloin* man's love to find.
AMO.

Sal Tidman was a saucy jade,
And so was *Sal Prunella*;
Sam-Bucus was the beau of one,
Saul-Petre of the other.
S. D. GILL, 221 Spon Lane, Birmingham.

[1] Sick at the smell of a pipe o' bacca.

A *Peruvian bark* is *saline* fast
Ova the *silver water*,
Gold, honey, musk, myrrh, frankincense,
It bears *bacc.* for my daughter.
H. PORTLOCK, Stroud.

Cumin thro' the *rye* (*Ethyl* and I_2) we heard the clock *strychnine*,
Iridin on a *sapone*, she on a *rhoados*;
"I thought *Iodide* a laughing," said that *ferri scillæ* old *gent.* of mine,
"To see the *fascia* made eating an *acid. tart.* composed of *Irish moss*."
H. CHAMBERS, Brighton.

I think *kino* why I *amyl*,
A *scillæ gent. thyme ust* have been;
A heap *ammon.* y I have spent
In treating that *mag. Ethylene*.
W. H. HOARE, 592 Holloway Road.

Ma *rye ergot* a toothache, she *cudbear* to *cit.* nor *lye*;
Her gri-*macis* were 3-atic—*Amyli* heard her cry;
Canellæ hold *argent*-ly? Sure, don't *juniper* arm—
One pull—the tooth de *fœtid*; I *caryoph*' the *palm*.
EAST ANGLIA.

A BAD PRACTICE.

Some juvenile *apothecaries weight*-ed with the dumps,
Fly to the *C.* duty, who manipulates the pumps.
Don't ℈ to ex-*lb.* the truth, ℥j. to all such sinners;
It goes against the *gr.* to see 3 drinking young beginners.
WM. SPENSLEY, Liverpool.

Shellac caryophylli tartar belladon. with sighs?
Canella thus tormentil I'm *scilla*?
Podophylli ferri I'll *bael aloes*-'ng the prize,
Zinci aconite c'limon Parnassus the hilly.
[Shall I carry off a light heart or be laden with sighs?
Can a lay thus torment till I'm silly?
But awful I fear I'll be losing the prize,
Since I cannot climb on Parnassus the hilly.]
COUGH BALL.

Scilla Ben-zoin succin his 3*s*,
Without *æther* ℔j or ℈;
And *thus* he *lbs.* dull *caraway*,
And ♏ises trouble.
ALKANET WYNNE.

Aloe! *aloe*! pray what's amiss,
Did *Misce* fall, or what?
What makes her *caryoph* like this?
Or did she *cerat*.
SODA CARE.

Myristica-nut use at all,
It *galls* me, and I *rue* the day
That *scillæ* chap o'ertarned the *bael*;
I *hop mastic* on him to lay.
A. WHITELAW, Peebles.

When *Io-dine*-d with *Mercury*, she fell with *tormentil*, and was,
Help not forth-*cumin*, dead in *thyme* from, *acids* called, an unknown cause;
'Twas *Seneka* the *Sage* who said 'midst endless medi-*coll-odium*:
"I thin *kino* the cause of death—yes, *Io-dide of sodium*.
ANONYMOUS, 16 Coleman Street.

Aloe and *scillæ lackey*, smoking his *piper bacca* and *cumin* with his *pistil* thro' the *rye*,
Shot at *sumbul*(s) but *mist.* his *marc*, and hit *pur. Anisi*;
The *panis* were more than she *cudbear*, *anthem mori* tried to ease her,
The more she was in *tormentil* her *masher* came to squeeze her.
NIL DESPERANDUM.

Canella cusso such a lot?
Thus Nick must have within *ergot*;
It *galls* me—I *cinchona* chair;
If I weep—*willow* she de-*myrrh*.
S. PORTER, Croydon.

A *scillæ Syr.* once *chamomile*
To *cort. aurant.* Vanilla:
"You *liquor ferri mosch*," *quassiæ*;
"I *cudbear* that *tormentilla*."
JOSEPH BOYLE, Glasgow.

"Give *ova*, *uva scillæ whey au-rant*-ing," *myrrh-myrrh*'d *Sal*,
"I may not *lac anisi* but I'm n-*otto rosæ gal.*;
Euonymin a *myrrhæ* j-*oak*—be *still*, no *mori* pray!
Does *paperveri*(s) *starchy wax*?—'tis *thyme* to *goa* way."
W. SPENSLEY, Liverpool.

Amyli ran *annatto* slay,
"You've stung *myrist*, you'll *ruta* day."
"*Argent*, your *fol*-ly's great, I fear,"
"Catch me when there's *ammonia*."
EAST ANGLIA.

Canella thus pine for *attar*,
Orris her *bow* a *manna* war,
Who'd fain see *belladonna* veil
With *anæsthetic tar* to sail?
G. G. MACKENZIE, Alness, N.B.

Said the turnpike man to *sumbul* one day,
"Before you pass the *tolut* pay,
Or I'll *strychnine* times on your crumpled horn
And *tormentil* you wish you ne'er were born."
P. GRIFFITH, Burnham.

A MYRRH-MYRRH.

Aloe! *resorcin* care, my *C. & D.*,
Anisi dea, to *ex haustus* in this way;
Myricin hopes were *soda* lone in thee,
But now, you *scillæ* fellow, *goa* way.
CORPORAL TRIM.

"*Sapon.* my honour, *Frankincense*,
'Ye have n' *ergota gr. essence*,
Ye'll *tormentil* ye get the *succh.*
Here, post this letter and be quick *bacc.*"
W. A. G.

"'Tis *Amyl ad*! a *lac* a day! and have you *Salicine*?"
"*Iu ferri am*," *tart Ben-zol sed*, "*Sal* loves *aloe Ben-zine*;
It *galls* me much *tolu*se her *thus*, though words and looks *archil*;
My *violated* heart's deep void not e'en *canella* fill."
T. D. WRIGHT, Southport.

In *manna drachm-a-tic to-Lu* I proposed,
"*Ad-myrrh*-'d one, *O-live aloe*-ne mine!"
I *juice-t caut-er-ise*, *an-them-I-dis*-pise
If *une-think hair oil resin*.
A. L. M.

YE PERSUASIVE CHEMIST.

"I ℈ not, O *Rosa gall.*,
To say I *camphor* thee.
Oh, do *elect* me, *Rosa can.*
I not be thine own *Manna*?"

HARD PUSHED.

"*Cumin*, my *sarsa Rosa*; don't *scilla* be or shy,
Anchus a pretty posy to give to *Sam-buci*;
He's *ricin-i* the world, dear, *antimony* ne'er *shel-lac*,
Be *ferri* kind to Sam, dear, and *thus* you'll bring him *bacc.*"

F. P. BALLARD, Wootton Bassett.

No *gallon* earth is there *morphine*,
For *Sal ammoniac* I *pine*;
All other *hops* I shall *resin*
To *caryoph* and *calamine*.

R. E. BROWN, Brighton.

To win her love *cinchon* thy knee,
And *creta* with a smile;
Say, "*Rosæ, can.* I *camphor* thee?"
"No!" *Sarzæ* said; "I *morph* awhile."

DONOVAN.

When *Piper Alb.* goes on his rounds,
To earn his scanty wages;
Of course as usual *pepsin* a "pub,"
And *farina cup*(of)*rum* rages.

W. J. DAVIES, Cardiff.

Attar Sus (*æther* in dream or thought), *bitumen* foully slain,
I saw her *cinchona pallid* couch, I heard her shrieks of pain;
Each *manna* sword-thrust gave and fled, and *thus pur. Io-dide*!
At such a *cerasous* sight I wept, but soon *mihi hydride*.

T. D. WRIGHT, Southport.

UNDER DIFFICULTIES.

Myristicæ is sprained,
Each *digitalin*—ha!
Each *lini* write the *mori*'m pained,
Four *cervi* see *ta*(r)-*ta*(r)!

PUNS ASINORUM.

"You are *ferri* unkind to *steel* kisses so
Syrup-titiously under the *rose*;
The *mori* endeavour to make you let go,
The *morrhua* light on my nose."

H. HERBERT, 49 Gt. James Street, N.W.

A SPIRITUOUS DRAMA.

He ℈℈ not to take a ʒ
Olive liq. me and *spts.* fly,
She gave abʒ, the door a slam,
And from his lips *ess. capsici.*[1]

M. L. JOHNSON, Torquay.

[1] Escapes a sigh.

Pap-av you heard our *anthem*?"
A youthful *piper* cries;
"It's bound to *flor* the others,
And *caryoph* the prize."

W. C. SCOTT, Lewes.

"*Can-Ada ba(w)l-Sam*?" said *Sal-Ol*; "here's *Chris-a-robin* me."
"Give me *mastic*," said *Sam-Buci*, "I'll fight for *Rose-Mary*."
Frank-Incense smote *Chris-on* the *hip*, and pains of *hel-e-bore*.
Let *soap* he's ceased to *caryoph Iodum tannin sore*.

A. J.

Cumin and *myrrhæ lettuce* be,
Let pleasure *caryoph* our gloom;
Anisi thing it is for me
To *hop* for *morphine* days to come.

JOHN ANDERSON, Macduff, N.B.

Mist. Aper. ferri scillæ like did *sarsæ*ly de*myrrh*,
And *castor* chap away with sneers, and so he did *sacchar.*!
"*Aloe*! *sublime* your *manna* is," said he; "I *ment.* to-day
To *caryoph* my *gallæ*lect, and put all *caraway*.
[It will be convenient if we append the English of this:—
Miss Taper very silly like did sarcily demur,
And cast her chap away with sneers, and so he did "sack" her!
"(H)allo! sublime your manner is," said he; "I meant to-day
To carry off my gal elect, and put all care away."]

T. O. KENT, Walmer.

"I've *camomile*." "You've *camphor* what?"
"This tooth you must *extract*,"
Her face with tears all *glycerine* is one *fluid dram* compact;"
"*Lettuce pro seed*; the tooth is out," her *scillæ squills* are *ore*;
"But what *ammonia*?" ne'er she asks, but *seidlitz* to the door.

A. C. DUKE, Burntisland.

Editor, *melt* thy stony heart,
Anchusa verse of mine;
I *opium thus* to gain the prize,
If *aloes* I won't repine.

A. S. DAVID, Pembroke.

"A *tannin, Syr.*, is what you need:
A nice young man you soon will be.
You *myrrh-myrrh* at your screw, indeed,
The *ricini* should like to see."

LEUMAS.

"Say *euonymin* to chaff me! When was last my *Salicine*?"
"Our tailor, *Kino, camphor* her upon all h'*aloin*;
The bills *iodoform* a *weight* that few *cudbear*—and *thus*, oh!
We'll let h-*ergota* him she *pix, resina*, and don't *cuss-so*!"

R. W. COMPTON, St. Leonards-on-Sea.

"A *Veratrine Myrrh*-age *Orange-mint*."
I'm *cumin* to *myrrhæ Rose-Mary Granati*!
She's *anise savin*-g maid, both *plac-nt annatto*;
I *camphor* a wife and Rose *tar-rhei*-d *aloin*:
"Shall we *sinapis paper* [sign a piece of paper], *Rose*, pet, and be one?"

R. MADGSHON, Jarrow.

"*Aloe*!" sweet *Rosæ* fondly cried, "'mongst *alumen* I see
Argenti lichen to with joy, so do not *scillæ* be;
Your pleadings are *asseli* think, your *cort-ing* I despise,
For the *piper* playing *anthems* sweet will *caryoph* the prize."

W. A. THOMPSON, Sunderland.

A *scillæ* young pharmacist I know,
Who bought all his breeches of *Kino*,
When they sent in the bill to this *sarsæ* young *pill*,
He *myrrh-myrrh*-ed, "By *gum*! where's the rhino?"

PUNDIT.

"I must re-*buchu*, fickle *Rosæ*,
Because your mamma's *ferri* queer;
With *honey*'d words you'd one *thyme* greet me
But now *Sam-Buci*'s *cumin* here."

BENZOIN.

About two dozen post-cards were received too late for competition, amongst them the following:—

A *boldo buchu*-neer ne'er was than *Sam-Buci the elder*,
ij. caryoph a *rosæ gall*, in the *manna* that I'll tell yer;
He made *ergota* sea with him, this *scillæ* lass *Sabinæ*,
Then *ung.* the poor *C* a mast, *antipyrin* the briny.

UNIFLORA.

My *antim* arched into my shop one day
In a *tereble manna* gasped she.
She must have been in a *creta gall.* state
For she died of *cinch. o. p.*

W. H. HOARE.

"*Canella* and *Rosa Cumin, Ethyl* dear?"
"They are *Fehling* so *anchus* to shelter,
They've just *mist* the charge of *sumbul* that's at large,
And a *manna's bean pitched* in the skelter."

TOPSY.

From this collection we select the verse written by "Nil Desperandum," and beginning "Aloe and scillæ lackey," as the one which reads most smoothly and is most connected, while it brings in nineteen puns. To this we award the guinea, the writer being Mr. T. C. E. Osborne, 19 Moss Lane West, Manchester. Mr. W. Spensley, 107 Prescott Street, Liverpool, performs the feat of bringing twenty-three puns into his verse, beginning, "Give ova, uva scillæ whey," and to him we award an additional prize of half a guinea. East Anglia's clever verse, in which he relates how "Ma rye ergot a toothache," is also deserving of recognition, so we give the balance of the second guinea to Mr. W. Hindle, Gorleston.

THE old-established business of the late Mr. William Smart, Thetford, has been transferred to Mr. Wm. Hildyard, through the agency of Mr. J. Floyd, of Bury St. Edmunds, and Messrs. Berdoe.

THE directors of Henry Marks & Sons (Limited), sponge importers, have declared an interim dividend at the rate of 10 per cent. per annum, less income tax, on the profits for the half-year ending June 30, 1888.

IRISH, OF COURSE.—"Shure, docther, and the bhoy isn't a bit better. I hadn't a sixpinny bit, so I gave him as much o' the powder as would lie on five pinnies and two ha'p'nies, an' he's bin in a terrible state all noight."

THE annual meeting of German physicians and scientists, which will be held at Cologne about the middle of September next, promises to equal in interest and importance its predecessors at Wiesbaden and in Berlin. An exhibition will be held in connection with the meeting. It will remain open for a fortnight, and British manufacturers are invited to exhibit goods of pharmaceutical or medical interest. No charge is made either for space or for superintending the exhibits, and applications should be promptly addressed to the Honorary Secretary, "Wissenschaftl. Ausstellung der 61. Versammlung Deutscher Naturforscher und Aerzte," in Cologne.

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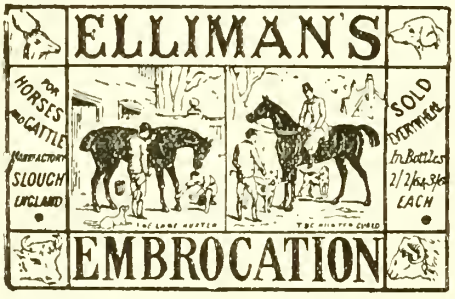

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EDITORIAL NOTES.

DOCTORS' SHOPS.

Important Decision Under the Pharmacy Acts.

The report which we publish to-day of the prosecution under the Pharmacy Acts at Hamilton, Lanarkshire, shows another important advance in the judicial interpretations of those Acts. In the Baillie case decided in Edinburgh in February of last year, Sheriff Rutherford gave effect to the opinion of Lord Selborne that the seller of poisons must be a qualified person. In that case Baillie was "covered" by a registered chemist and druggist. The circumstances are widely different in the Hamilton case. The defendant was placed on the register in 1885 in virtue of having been in business on his own account prior to the passing of the Pharmacy Act, 1868. In March of this year, the Pharmaceutical Council ascertained that the defendant's declaration was false; for that reason his name was removed from the register, and he was duly notified of the fact. He continued to carry on business notwithstanding, and the Society now prosecutes him for selling poisons, for keeping open shop for the sale of poisons, and for assuming the title "chemist." The evidence which was submitted on behalf of the defendant showed that he had "with all reasonable haste" made over the business to a qualified medical practitioner, and the Sheriff, therefore, considered that the charges of keeping open shop and of assuming the title of chemist could not be sustained. But it was decided that he had technically committed the offence of selling poisons, and was convicted on that point, although the Sheriff did not think the offence so serious as to call for a fine. This decision supports to the full that which Sheriff Rutherford arrived at in the Baillie case. Sheriff Birnie, however, makes a most important extension of the principle. It happens that the first section of

the Amendment Act of 1869 exempts qualified medical practitioners from the first fifteen sections of the 1868 Act. Relying on this, counsel in the Hamilton case submitted evidence to show that the defendant was the assistant of a duly qualified medical practitioner, and was therefore exempt. He also argued that as the practitioner in this case was qualified before 1868 he was entitled under the 16th section of the Act of that year to continue the practice prevailing before that time. This has an air of forlorn hope about it, and we may add that the practitioner in this case is not an apothecary, so that the 16th section does not apply. Apart from that, however, the Sheriff maintained that both Acts must be taken together, and he ruled that while qualified medical practitioners may keep open shop and sell poisons, their assistants, if unqualified, may not do so. Setting aside the strictly legal grounds on which he based this decision, Sheriff Birnie added, "I cannot think doctors are entitled to lay the risk on the public of having an unqualified assistant, although they cannot supervise themselves;" and previously he remarked, "My opinion rests on the broader grounds that a gentleman in Dr. Lennox's position, who cannot possibly be in the shop except on very rare occasions, must have a qualified assistant in that shop." This opinion, given in the heart of a county which is a perfect hotbed of doctors' shops, cannot fail to have a most salutary influence. We have recently pointed out that these doctors' shops are generally managed by unqualified persons—the evidence for the defence was, indeed, directed to show that that is the case—and there has always been a strong feeling that something should be done to remedy the evil. An opportunity for action has now arrived. Sheriff Birnie has given the Pharmaceutical Council a weapon which they can, if they like, use to some purpose. We trust they will use it, and that at the same time they will with fairness employ the one that Sheriff Rutherford sharpened for them. There has been delicacy hitherto as to how far they might carry the powers given to them in the 15th section, and Mr. Bremridge cleverly indicated the feeling of the Council in his evidence. But there need be do hesitation now. Sheriff Birnie stated clearly the circumstances in which the section need not apply. That section simply means, he said, that "there must be a qualified person for the protection of the public, having what has been called the supervision of a chemist's shop. That you may have numbers of unqualified persons is very probable, and that in practice you may have them occasionally acting on the general orders of their master, dispensing a small quantity of poisons in the absence of their master, is also probable; but I have not the slightest doubt of this, that as laid down by Lord Selborne the protection of the public demands that every chemist's shop shall be under the immediate and reasonable supervision of a qualified person."

THE NATION'S HALF-YEARLY STOCKTAKING.

It is now more than a year ago since the impartial voice of the official statistical returns commenced to sound notes of improvement, slow and halting at first, then clearer and resonant, until now, upon the addition of another half-yearly volume to the records of our foreign commerce, there can be no longer any doubt of the cycle of prosperity upon which we have entered. To compare the returns for June, 1888, with those of June, 1887, would be manifestly unfair, considering that during a portion of the former month business was practically suspended in many parts of the country on account of the Jubilee festivities. In June, 1886, again, we were in the throes of a general election, and that month also affords no suitable parallel. A fairer way for taking stock of our commercial position is to consider the first half of the present year side by side with the corresponding portions of its two most recent predecessors. We then observe that from January 1 to June 30, 1888, our entire foreign trade has been worth 334,482,890*l.*, against 313,322,347*l.* and 301,269,116*l.* in the corresponding periods of 1887 and 1886, respectively. Thus, in two years' time the total value of our commerce has increased by 11 per cent., while the bulk of the goods we received from abroad, or transhipped, or exported—in other words, the greater part of our material welfare as a nation—has grown in still larger proportions, and greatly exceeds that increase in the population of the country which would account for a smaller growth. The improvement is distributed rather unevenly over all our departments of trade. It has been particularly pronounced in our exports of materials in a more or less complete state of manufacture, goods upon which a high percentage of wages has been earned, and in imported articles of food and drink, showing that, on the whole, the population of the country has had more money to purchase nourishment with, and has used its means freely in this direction. The imports of dutiable foodstuffs and beverages are the only branch in which there has been a falling off, and this is to some extent accounted for by the reduced importation of coffee (2,498,152 lbs. against 3,041,091 lbs.) consequent upon the failure of the crop in Brazil. Wines and spirits have also been imported to a less extent, but this deficiency is probably ascribable to some more occult cause than the increase of temperance views among the nation at large. In the half-year just past we paid to foreigners (mostly Germans, French, and Belgians) 1,503,556*l.* for eggs, 326,669*l.* for raw vegetables, and 179,128*l.* for poultry and game, an expenditure which, under proper agricultural conditions, could no doubt have mainly been made at home. Bounty-paying countries supplied us with 2,663,448*l.* worth of the cheapest refined sugar in the world, the possession of which must have materially contributed to the growth of our confectionery industry, recorded in another part of the returns. Indian tea, it is now clear, is thoroughly beating the Chinese product out of the field. In the first half-year of 1886 we still imported a far larger quantity from China than from the British Indies; last year things were about equal, but during the six months just past India sent us 36,335,376 lbs., and China only 33,813,338 lbs. The imports of metals reveal no features calling for special comment, except the increase in the arrivals of copper, which have nearly trebled as compared with the corresponding six months of 1887. The imports of chemicals and dyestuffs show a fair increase, and the same is the case with most oils. Over two-fifths of our imports of raw materials for texile manufactures—cotton, jute, hemp, silk, flax, wool, &c.—arrive from British possessions; of 17,737,964*l.* worth of wool imported in six months, Australasia alone furnishes over 14,000,000*l.*, and South Africa and British India two-thirds of the remainder. The manufactured articles which we import from abroad, to the extent of about 28,000,000*l.* in six months, include almost every imaginable variety of goods, but the bulk falls under the headings of silk, wool, cotton, leather, iron, paper, or glass manufactures. It may be mentioned incidentally that in the six months just ended we were indebted to the foreigner for 8,919,276 pairs of gloves 2,817,360 lbs. weight of straw bonnets and hats, and 1,588,420*l.* worth of ribbons of all kinds, mostly silk and satin. The value of drugs imported during the same period has risen from 305,193*l.* in 1887 to 465,506*l.* in 1888. Altogether we received during the half-year 189,729,707*l.* worth of goods from abroad, against 178,867,159*l.* in 1887, an increase of about

6 per cent. Now let us turn to our exports. These the official compilers classify under four branches, one of which, viz., "manufactured and partly manufactured articles," comprises nearly seven-eighths of the whole. The others are articles of food and drink, raw materials, and living animals. In all of these branches there is a large increase, the total sum for the half-year being 112,677,945*l.*, or 8 per cent. above the first half-year of 1887, when it attained a total of 104,295,890*l.*

Taking the smallest branch first, we find that our exports of living animals have very largely increased, owing to larger purchases of horses by the United States and the Continent. Articles of food and drink we have also sent abroad in large quantities; but here the increase falls in the main under the headings of beer and spirits, to which Australia, the United States, and the African west coast are becoming more and more partial. In confectionery, condiments, and provisions we have also done well, but badly in butter, cheese, fish, and salt. The "raw material" exports consist principally of coals and wool. "Manufactured and partly manufactured" articles show an increase all round, the growth for the six months being, in round figures, 19 per cent. on machinery and mill work, 11 per cent. on metals, 11 per cent. on wearing apparel, 8 per cent. on chemicals, 3 per cent. on textiles, and 16 per cent. on miscellaneous articles. With regard to the exports of chemicals, it is a fact worth noting that our alkali shipments continue to fall, though an improvement in this respect will probably occur upon the passing of a Tariff Bill in the United States, alkali being an article which is almost certain to be included in any tariff reduction. Still, so far as our manufactures are concerned, the reduced shipments of alkali are more than compensated for by the growth in the exports of bleaching-powder, which, at the prices now ruling, is a far more profitable article. Our exports of drugs and medicinal preparations have risen from 417,366*l.* to 469,948*l.*, but, unfortunately, this bald statement does not throw any light on the channels in which this increase has flowed. Our re-exports of colonial and foreign merchandise have risen from 30,159,298*l.* to 32,075,238, a satisfactory though not a large increase, in connection with which it may be stated that foreign countries are making rather less use of us as a half-way house through which to pass their manufactured goods to the consumer, while on the other hand they buy more raw colonial goods (wool, coffee, oils, rice, fruit, &c.) from us than they were wont to do. Summarising the commercial situation of the country, we can only find cause for congratulation. Decidedly the decay of our commercial system does not appear to have set in as yet. While John Bull can still afford to purchase food and drink from abroad at the rate of twelve and a half million pounds per month, and to smoke a couple of hundred thousand pounds worth of tobacco during the same period, while his daughters spend over a million pounds monthly on foreign silks, gloves, straw bonnets, and ribbons, there appears some force in the view that we may well be content to live on unconcernedly until the Gulf Stream changes its course, or General Boulanger emerges through the Channel Tunnel.

PATENTS AND TRADE-MARKS.

We briefly referred last week to the Bill which has been introduced into the House of Lords by the Earl of Onslow for the purpose of amending the Patents, Designs, and Trade-marks Act 1883, and now give more fully the leading features of the Bill. The first, and in some respects one of the most important proposals is that which is to ensure the proper qualification of persons acting as patent-agents. A few months ago a Queen's counsel who is noted for his proficiency in patent law made the remark to a judge that if he had ten minutes at the drafting of the specification upon which an expensive lawsuit had been based he would have been able to save his clients many hundreds of pounds, besides anxiety. The remark showed where a weakness lies in the procuring of patents. Inventors, as a rule, trust the drafting of specifications to their agents, and unless the latter have a precise knowledge of the subject they are dealing with, it is consistent with the condition of things that the specification which is drawn up should be an incoherent mass of words. This frequently happens. It is, therefore, desirable, for this and other reasons, that all who act as patent-agents should give evidence that they have a competent knowledge of the laws which they profess to interpret and the technical subjects which they specialise. Consequently the Bill provides that after July 1, 1889, no one shall describe himself as a patent-agent unless he is registered as such; it will be the duty of the Board of Trade to register all persons as patent-agents who prove that they have practised as such in the United Kingdom for twelve months before July 1, 1889, and subsequently they may make such rules as they may consider to be necessary for giving effect to the new provision. The penalty for contravention of the section is not to exceed 20*l.* The 7th section of the 1883 Act, which provides power for the comptroller to refuse application or require amendment, does not in the latter case allow for any loss of time which the applicant may incur in amending his specification, but in Lord Onslow's Bill this is provided for: if the comptroller so directs application will date from the time that the amended specification has been lodged. To the same section of the Act a sub-section (5) is added, which gives the comptroller power to deal with a second application for a patent for the same or similar thing for which a previous application not completed has been made. By this sub-section the comptroller may, within two months after the patent on the first application has been granted, refuse to proceed with the second application. This power would apply in such a case as that of Kurtz *v.* Spence, which created so much attention a few months ago. Here one application was lodged shortly after another, the patents being practically for the same purpose. Patents were granted in both cases, and hence the expensive litigation. The new provision will prevent such procedure by giving the first applicant a chance of opposition to the second application. The only other important amendment to the patent law, excepting the extension of the Act as a whole to the Channel Islands, is contained in the 11th section, which relates to opposition to the granting of a patent. At present this may be done on the grounds that the applicant has obtained the invention from the opponent, or that it is already patented; but the Bill now before the House of Lords has added to the grounds of opposition by providing that, if the complete specification describes or claims an invention other than that described in the provisional specification, anyone may enter opposition who since the lodging of the latter has applied for a patent the same in subject as the complete specification.

Our recent articles in regard to the working of the 1883 Act in relation to trade-marks showed that there are many points in that Act which require strengthening. This obtains more especially in regard to what may be registered as a trade-mark. The Bill here makes several amendments to the 64th section of the Act, which we reproduce in full with the proposed alterations and additions printed in italics:—

(1.) For the purposes of this Act a trade-mark must consist of or contain at least one of the following essential particulars:

(*a.*) A name of an individual or firm printed, impressed, or woven in some particular and distinctive manner; or

(*b.*) A written signature or copy of a written signature of the individual or firm applying for registration thereof as a trade-mark; or

(*c.*) A distinctive device, mark, brand, heading, label, *or* ticket; *or*

(*d.*) *An invented word or invented words; or*

(*e.*) *A word or words arbitrarily selected and having no reference to the character or quality of the goods, and not being the name of any place.*

(2.) There may be added to any one or more of *the essential particulars mentioned in this section* any letters, words, or figures, or combination of letters, words, or figures, or of any of them; *but the applicant for registration of any such additional matter must state in his application the essential particulars of the trade-mark, and must disclaim in his application any right to the exclusive use of the added matter, and a copy of the statement and disclaimer shall be entered on the register.*

(3.) Provided *as follows*:—

(i.) *A person need not under this section disclaim his own name or the foreign equivalent thereof, or his place of business, but no entry of any such name shall affect the right of any owner of the same name to use that name or the foreign equivalent thereof;*

(ii.) Any special and distinctive word or words, letter, figure, or combination of letters or figures or of letters and figures used as a trade-mark before the thirteenth day of August one thousand eight hundred and seventy-five may be registered as a trade-mark under this part of this Act.

It will be seen that these additions considerably extend the definition of a trade-mark. The additions to sub-sections 1 and 2 affect mainly what has been generally known as "fancy words" since the Act of 1883 came into force. The comptroller has done pretty much as he liked regarding these, and if we may judge from the number of fancy words *plus* a signature which are registered, most of those desired to be registered as trade-marks are not considered to be suitable when they stand alone. Now the term "fancy word" is proposed to be omitted, and in its place we have the clauses *d* and *e*, which purposely are the interpretation of the term, lay down the law for the comptroller, and clearly indicate to the applicant what words properly come within the meaning of the term. Sub-section 2, as amended, is very clear, and will prevent annoyance and trouble from parties who register, for example, a label with a title and design upon it, and then suppose that they have got protection for the use of either of these separately. They will now have to declare which of these they consider essential; if both, then both must be registered as distinct trade-marks. The same thing exactly applies at present excepting the declaration, and this will make it easier for the comptroller in dealing with future applications, and will also prevent litigation. The association of a person's name or place of business with any particular device in most cases identifies the name with the device wherein the value of the trade-mark lies, and the third sub-section permits such association, without, however, excluding any other person of the same name from having his name registered in connection with a different device in the same class. These provisions are by an amendment to the 74th clause also to apply to the applications for registration of marks used before August 13, 1875. Hitherto trade-marks have been registered in any colour, but the Bill provides for any *colours*. Also in the case of opposition notice has at present to be given within two months of the time that the application is advertised; in the Bill this is changed to "one month or such further time not exceeding three months"; and the applicant is only to have one month instead of two to reply. Four new sub-sections to the 69th section of the 1883 Act give the comptroller power to hear parties in such opposition cases; his decision may be appealed against to the Board of Trade, who may in their turn refer it to the court, and if the applicant abandons his application after notice of opposition, the comptroller will settle what costs he will pay his opponent. For the purpose of this section foreign opponents must give an address of service in this country, this requirement also being enforced on all applicants for trade-marks. It is proposed to insert a new section between the 77th and 78th of the Act, which will enable the court or judge who decides an action for the infringement of a trade-mark to certify the right to exclusive use of such trade-mark, and this certificate will entitle the plaintiff in any subsequent action to full costs, unless the court or judge certifies to the contrary. Another notable point in regard to registration is that which affects a trade-mark removed from the register owing to non-payment of fee. The present Act prevents the registration of the same mark again for a period of five years, on the ground that it is already registered. The Bill proposes to reduce this period to one year, "unless it is shown to the satisfaction of the comptroller that the non-payment of the fee arises from the death or bankruptcy of the registered proprietor, or from his having ceased to carry on business, and that no person claiming under that proprietor or under his bankruptcy is using the trade-mark." With the exception of section 81, which deals with Sheffield trade-marks, the only other alteration affecting applicants is in section 91, wherein an additional sub-section provides for the applicant amending his application by omitting any particular goods, or classes of goods, in connection with which he has desired the design or trade-mark to be registered.

The Bill is introduced somewhat late in the session, and, although it is a Government measure, the state of business in the House of Commons does not warrant the hope that it will escape the massacre of the innocents which characterises the dog days. It will be none the worse of six months careful consideration, however, and in that time other proposals for further amendment may be forthcoming.

Advertising Pays in Mexico. The German consul in the City of Mexico, in his report on the commercial situation of the Mexican Republic during the year 1887, bears testimony to the general superiority of the English trade journals as compared with those produced on the Continent. This testimony is all the more valuable because it is evidently given with reluctance, the writer being clearly more concerned to hold us up to his countrymen as an example of what they ought to do than to advance British interests. His theme is the importance of Mexico as a market for pharmaceutical preparations, and he attributes the local success of British, American, and French firms to their systematic mode of bringing their specialities before local buyers by means of illustrated advertisements, adding that persons of experience in the drug trade give it as their opinion that the English technical press is decidedly superior and better informed than are the Continental drug journals which occasionally find their way into Mexico. The consul is careful to add that mere advertisements of business addresses, without any information regarding the goods offered, and not illustrated, are not sufficient to bring about business. Into the question whether the lavish style of advertising adopted by certain American and English manufacturers is remunerative the consul is not disposed to enter, but he distinctly affirms that it has the effect of increasing the shipments of the advertised goods.

***

Defying the Council. The account subjoined shows what it costs offenders against the Pharmacy Act who resist the demands of the Pharmaceutical Council, even to a County Court. The bill is one actually rendered, and is of course in addition to the fine and the costs incurred on defendant's behalf.

In the County Court of Kent, holden at ——.

BETWEEN the Council of the Pharmaceutical Society of Great Britain, by Richard Bremridge, the Registrar of the said Society, by the authority of the said Council, plaintiffs, and ——, defendant.

Plaintiffs' costs on verdict to be taxed on scale above 20*l.*

		£	s.	d.
Jan. 1.	Letter before action	0	3	6
„ 30.	Instructions to sue	0	6	8
	Preparing particulars of claim and copies	0	7	0
	Attending entering plaint	0	6	8
	Paid fees	0	11	0
	Attending on analyst with poison for analysis	0	6	8
Feb. 7.	Notice to inspect and admit and copy	0	4	0
	Service thereof	0	2	6
	Notice to produce and service thereof	0	6	6
	Attending defendant's solicitor, giving him inspection of documents	0	6	8
	Attending at County Court, making application, and obtaining two subpœnas for service	0	6	8
	Rail	0	1	6
	Copy and service of subpœna on — at —	0	5	0
	„ „ „ Mr. — at —	0	2	0
	Writing analyst requesting his attendance as witness herein; The like to Mr. —	0	5	0
	Instructions for brief	1	10	0
	Drawing same, fols. 28	0	1	8
	Fair copy	0	9	4
	Copy particulars to annex, fols. 4	0	1	4
	„ letters to accompany, fols. 8	0	2	8
	„ agreement to accompany, fols. 9	0	3	0
	„ notices to accompany, fols. 8	0	2	8
	Fee to council	3	5	6
	Attending him	0	6	8
	Fee to him in conference	1	6	0
	Attending, appointing, and attending thereon	0	6	8
„ 20.	Attending Court on trial when judgment given for 5*l.* penalty, with costs on scale above 20*l.*	0	15	0
	Paid hearing fee	1	0	0
	Rail	0	1	6
	Drawing costs and copies, fols. 6	0	6	0
	Attending for appointment to tax	0	3	4
	Notice of taxing, copy and service	0	4	0
	Attending taxing	0	6	8
	Letters, &c.	0	5	0
	Paid witnesses as under :—			
	Mr. —, accountant	1	1	0
	Mr. —, overseer's clerk	0	10	0
	Mr. —, analyst, for two analyses	1	1	0
	Attendance and travelling expenses	2	2	0
	Mr. —, travelling expenses to and from —	1	0	9
	Attendance	0	15	0
	Mr. —, attendance as a witness	0	15	0

With remarkable generosity, the pursuers deducted 2*l.* from this bill, and the defendant was served with an order to pay 26*l.* 9*s.* 7*d.* into Court. Verily, he has paid dear for his whistle.

Trade Notes.

MESSRS. HEADLAND & Co. have opened another chemist's business in Brighton, the favoured locality being Western Road, Hove.

IT will be observed from an announcement on another page that the Board of Inland Revenue do not consider Evans's Fossiline to be liable to stamp-duty.

MR. D. W. GREENHOUGH, 16 Mincing Lane, E.C., has been appointed sole London agent for the Aluminium- und Magnesium-Fabrik, Bremen-Hemelingen.

IN consequence of the resignation of Mr. A. H. Mason as general manager of Evans, Sons & Mason (Limited), Montreal, that position has been assumed by Mr. Alfred Bickerton Evans, one of the directors of the company, and a partner in Evans, Sons & Co. Mr. Evans, in addition to his experience in the Liverpool firm, has actively assisted in the management at Montreal for the greater part of the past three years.

FAILURES AND BANKRUPTCY REPORTS.

JOHN HENRY HOLMES, Colwyn and Colwyn Bay, Chemist and Druggist.

A MEETING of the creditors of this debtor was held in the offices of the Official Receiver at Chester on July 6. The alleged causes of failure were "high rent and inadequate return for money invested." According to the debtor's summary it appeared that his assets exceeded his liabilities by no less than 1,155*l.*, but this was the result of over-estimating the assets. The Official Receiver, in his observations, said, "The debtor filed his own petition, and he intends to make an offer of composition. There can be no doubt that his stock and fixtures have cost him very much more than the amount of his debts as stated. Suspension of payment must be set down to the want of prudence shown in his investing so large an amount of capital in very expensive fixtures and fittings, and in stock quite out of proportion to the needs of the small village in which he carried on business for the last four years. Though he commenced at Colwyn with above 800*l.* of capital, after paying above 500*l.* for shop fittings he seems to have had recourse to loans at a very high rate of interest within less than two years after he had started." The debtor, who was formerly in business at Sutton Coldfields, Birmingham, has been at Colwyn four years, and has spent about 600*l.* on fixtures and fittings for a small chemist's shop in a by-street. His liabilities are not correctly scheduled, one debt of about 150*l.* being omitted, in addition to several smaller ones. The stock, estimated to have cost 1,000*l.*, appears to be considerably over-estimated. Debtor was adjudged bankrupt, and Mr. J. W. B. Brown, accountant, 14 Kemp Street, Birmingham, was appointed trustee, with a committee of inspection.

Re W. S. WEEDING, West Cowes, I.W., Chemist and Druggist.

THE public examination of this debtor was held in the Isle of Wight Bankruptcy Court last week, before Mr. F. Blake, the Registrar. A full account of the state of the debtor's affairs appeared in THE CHEMIST AND DRUGGIST last week. He now stated that he had an interest in some property, and expected to receive about 400*l.* from it on the death of his father and step-mother. He attributed his failure to dulness of trade, illness, and absence from business in consequence of illness. The debtor was allowed to pass his public examination.

Re FRANK LIVERSEDGE, Heslington Road, York, Dealer in Drugs.

A MEETING of the creditors of this debtor was held at the office of the Official Receiver, York, on July 6, when the debtor submitted the following statement of affairs :—Liabilities to unsecured creditors, 107*l.* 6*s.* 3*d.*; to creditors fully secured, 675*l.*, and to preferential creditors, 2*l.* 4*s.*, making total liabilities 784*l.* 10*s.* 3*d.* The assets are estimated to realise 53*l.* 11*s.* 11*d.*, and, after provision for preferential claims, leaves an available balance of 51*l.* 7*s.* 11*d.* and shows a deficiency of 55*l.* 18*s.* 4*d.* Previous to the meeting the debtor was adjudicated a bankrupt, but he now expressed his intention of making an offer to his creditors for payment of his liabilities in full. Under this proposal the meeting was adjourned until July 20.

Re JOHN BEVERIDGE, 37 Morrison Street, Edinburgh, Chemist and Druggist.

THIS bankrupt was examined in the Edinburgh Bankruptcy Court on Monday under a petition for *cessio* presented by a creditor. In reply to Mr. Romanes, C.A., the bankrupt said he began business in Morrison Street in 1876 with no capital. There was some stock in the shop, and he paid for additional stock out of money drawn. He had previously been in business in Anstruther. The landlord of the shop let it to another tenant last Whitsunday. He received no money for the stock, but left it for that which was in the shop when he entered it. The state of affairs was withheld. Sheriff Hamilton granted the petition. Mr. Romanes was elected trustee.

Legal Reports.

Milk Adulteration.

A case of some importance came up for hearing at the Aston Police Court on Friday of last week, Henry Foggett, a dairyman, being charged with selling to an inspector half a pint of milk, which Dr. Bostock Hill, the public analyst, certified to be adulterated with 10 per cent. of added water. The presiding magistrates were Messrs. A. W. Wills and A. Johnston. Mr. Tyrer appeared for the defendant.

The purchase of the sample having been proved, Dr. Hill stepped into the witness-box and supported his certificate of analysis. In cross-examination by Mr. Tyrer he refused to admit that 7½ per cent. of water allowance, mentioned in "Stone's Justice's Manual" is accepted by analysts, nor could he admit that they allowed anything for the age of the sample. He believed that the Somerset House chemists once made such allowance, but it had been "so much ridiculed by the profession" that he thought they had discarded it. He did not know that Dr. Bell's table, which he said appeared in a small hand-book, was in use by chemists. At this point the bench and counsel got somewhat mixed as to the meaning of 7½ per cent. of water being taken as the standard, and Dr. Hill explained that milk contains much more water than that, but not "added water." By the process which he used, the solids, not fat, should be 7·61, and the fat 3·95.

Further cross-examined, witness explained that he made no allowance in his analysis, as he used Adams's process. He considered that the whole question in reference to the Somerset House allowance had been fought out, and had been utterly discarded as being impossible. Milk varied so much that no allowance could be made. He did not admit that analysts were now fighting amongst themselves about the point, and stated that the dispute between them and Somerset House was stopped five years ago. He was prepared to swear from the result of his analysis that 10 per cent. of water had been added to the milk.

Mr. Tyrer having addressed the bench,

Mr. Richard A. Cripps was called. He said he was an assistant to Messrs. Southall Bros. & Barclay, pharmaceutical and analytical chemists, Bull Street, Birmingham. He was a Fellow of the Institute of Chemistry and a Member of the Pharmaceutical Society. For two years he was assistant to Dr. Attfield, F.R.S., professor of practical chemistry of the Pharmaceutical Society. On June 28 he received the sample of milk, of which he made an analysis, which showed that the amount of solids, not fat, was 8 37 per cent, with fat 3·43 per cent., making a total of 11·8. He made an allowance (Dr. Bell's) for lactic fermentation. The milk was kept eighteen days before he saw it, but he only made an allowance for fourteen days, because he understood it had been kept that time. The allowance amounted to an additional 0 34 per cent.

Mr. Wills: Practically it comes to this, that you found the milk adulterated to the extent of nearly 2 per cent. of water.

Witness: Nearly 2 per cent.

Mr. Wills: Well, Dr. Hill contends that no allowance should be made. That is the subtle point for us to determine.

Mr. Cripps quoted from the *Analyst* of December, 1887, in which it was stated that Mr. A. W. Stokes, the analyst for Paddington, had said Dr. Bell's scale would not allow a sufficient margin in some cases, and gave instances in support of his assertion. He added that, taking the mean of the allowance required by Mr. Stokes's figures in milks of about the same acidity, the sample in the present case would be very good. At Mr. Wills's request he read the extract from "Stone's Justice's Manual" in regard to the presence of 7½ per cent. of water in genuine milk, and said that there could be no doubt as to the meaning; it was absurd to think that the sample contained only 7½ per cent. of water altogether—it meant 7½ per cent. more than the usual limit, which was 88·5 per cent. of water. It was practically, from an analytical point of view, "added" water, although in this particular instance known to be natural to the milk.

Dr. Hill here said that the variations in milk were sometimes very strange. Sometimes no variation took place at all, and at others very rapidly. It was therefore absolutely impossible with any degree of accuracy to make any allowance. The only way was to make the analysis, and take it for what it was worth.

Mr. Cripps said he adopted Wanklyn's method of analysis.

After conferring with Mr. Johnson, Mr. Wills said they had decided to dismiss the case, on the ground that there were certain subtle points in it with regard to which the defendant ought to have the benefit of the doubt. They did not, however, for a moment wish to cast any suspicion on Dr. Hill's analysis or his ability. The difficulties which had been mentioned were inherent in a case of this description.

Inspector Bolt: Then you do not order it to be sent to Somerset House?

Mr. Wills: We do not.

Beecham's Pills, Pears' Soap, and Ecclesiastical Magazines.

In the Queen's Bench Division of the High Court of Justice, London, on Wednesday, the case of Vickers *v.* The Church Extension Association came before Mr. Justice Charles, sitting without a jury. This was an action for breach of contract, brought by the plaintiff, an advertisement contractor of St. Nicholas Lane, City, against the defendants, who are the proprietors of two monthly magazines called the *Banner of Faith* and *Our Work*. The plaintiff claimed that he had suffered damage by reason of the defendants breaking a contract, made with him in May, 1887, to insert an advertisement of Beecham's pills twelve times in each paper for the sum of 555*l.*, less commission, or a sum of 500*l.* net. On the faith of the agreement, plaintiff contracted with Messrs. Beecham, of St. Helen's, Lancashire, to procure the insertion of the advertisement in the papers named for the sum of 606*l.*, but the defendants broke their agreement by absolutely refusing to insert the advertisement in question, on the ground that they considered it objectionable and unsuited for publication in their magazines. The defendants, by their action, prevented the plaintiff performing his contract with Messrs. Beecham, and deprived plaintiff of the 106*l.* profit he would have earned. He therefore sued for that amount. The defendants denied the contract with plaintiff and plaintiff's contract with Beecham, and said that Mr. Stone, the person who made the alleged contract with plaintiff, was not their manager, he being simply employed to receive advertisements on a commission of 30 per cent., the defendants reserving to themselves the right to exclude any advertisements they might consider objectionable. They contended that plaintiff knew at the time that Mr. Stone had only a limited power to take advertisements, and that any arrangement he made was subject to the defendants' approval.

Mr. Lockwood, Q.C., M.P., and Mr. R. O. B. Lane were counsel for the plaintiff; Mr. McIntyre, Q.C., and Mr. Haigh were counsel for the defendants.

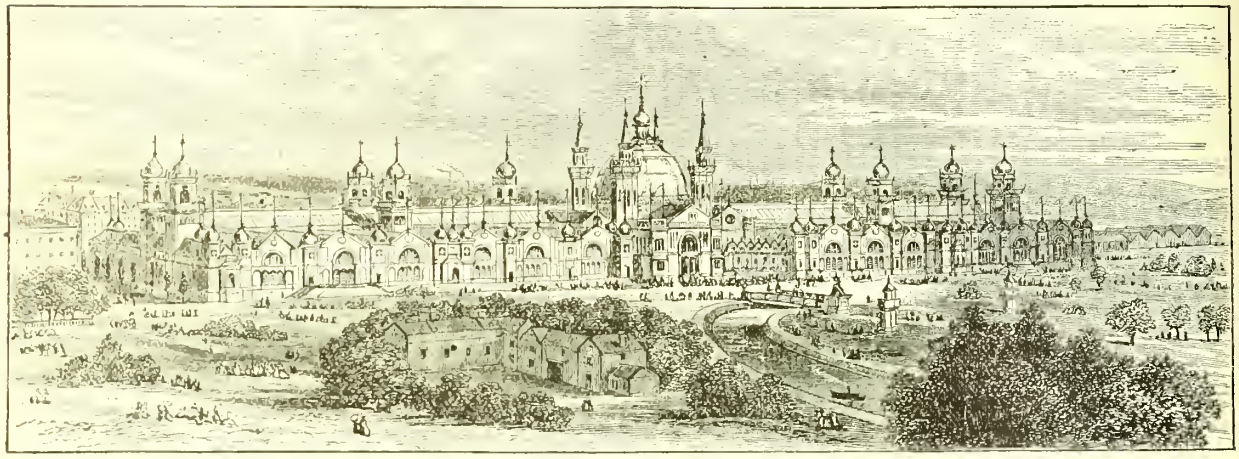
Evidence was given for the plaintiff by Mr. Bennett, advertisement canvasser for the *Banner of Faith*, who said he knew no one else but Mr. Stone as conducting the advertisements. There was a great fuss made about a Pears' Soap advertisement which appeared in the March number of the *Banner of Faith*. That advertisement was headed "The Un-Pacific Yarn," and included a lot of verses about a coloured bishop using Pears' soap. (The verses were read in court and created considerable laughter.) Witness said he did not know that Mr. Stone's discretion was limited in any way. Mr. G. A. Whitcombe, manager to the plaintiff, gave evidence as to the contract being made, and said that their quotation was accepted by Messrs. Beecham, because it was the lowest for these publications.

At the conclusion of the plaintiff's case Mr. McIntyre submitted that no contract had been proved to have been made by defendants to insert this advertisement, and that Stone had only a limited authority.

His lordship said the limited authority of Stone was not disclosed to the plaintiff. He held that the contract was binding on the defendants, and he therefore gave judgment for the plaintiff, damages 75*l.*

GLASGOW INTERNATIONAL EXHIBITION.

SPECIAL REPORT.

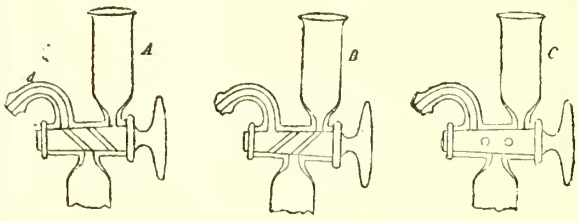


SINCE our last report the attendance at the exhibition has gone on increasing, and now the million and a half has been passed, thus exceeding the attendance of any other provincial exhibition previously held. As the summer months come in with their streams of visitors from all parts of Scotland, July and August being the "fair" or factory holiday months, it is expected that the attendance will be even larger. Tourists begin to come in, as well as many visitors who take a practical interest in the exhibits. Last week the members of the Society of Chemical Industry spent the better part of a day inspecting the courts which are of special interest to them. In the first week of August, when the British Medical Association meets in Glasgow, it is anticipated that many medical men will take the tour of inspection; exhibitors should, therefore, make some special effort on these occasions to place at their stands attendants who will be able to give that information which cannot be placed on labels, but which many visitors wish to obtain. It must be said that there is too little attention paid in the exhibition to this important requirement—an exhibit cannot always speak for itself, and it certainly will not bring business except it be well supplemented by personal attention.

In our previous report chemical and similar exhibits were described. We now turn to those sections wherein are shown philosophical instruments and other

APPARATUS.

In Court VII. the first stand which the visitor will inspect is that of **Baird & Tatlock**, 100 Sauchiehall Street, Glasgow. This is a handsome and intrinsically valuable exhibit of chemical and philosophical apparatus. Several portions of the exhibit are attractive, such as Fletcher's new oxygen blow-pipe, which we have already described. This blow-pipe utilises oxygen in the compressed state with coal-gas for the formation of a flame of exceedingly high temperature; so high, indeed, is the degree of heat produced, that hardened steel goods, such as files and the best steel plate, melt before the flame as if the material were sealing-wax. The samples of melted steel which are exhibited along with the blow-pipe doubtless prove that "the enterprising burglar" may outrun the safe-maker in the race; but we may confidently trust that most of the light-fingered fraternity are likely to burn their fingers in handling the apparatus which Mr. Fletcher has devised. This exhibit is but a small part, however, of Baird & Tatlock's collection. They show apparatus fitted for special purposes, such as that of Mr. Allen's for gas analysis, Soxhlet's apparatus for the extraction of fats, Coleman's liquid diffusiometer for demonstrating that the ascending column of a liquid lengthens in the ratio of the square root of the time of diffusion. There are many other interesting things in the case. We may call attention particularly to Lunge's improved nitrometer, which has certain advantages that will make it a favourite apparatus in aerometric determinations.

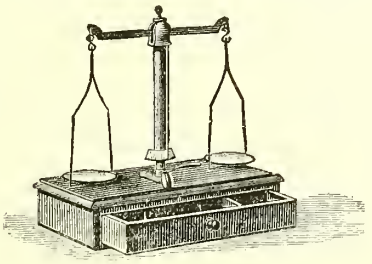


In the ordinary three-way stop-cock nitrometer it will be remembered that the "third" aperture is in the stop-cock itself, this arrangement being very inconvenient, in so far as when a piece of indiarubber tubing is attached to it the stop-cock is apt to slip should the vessel to which the tubing is attached be shaken. The improved nitrometer gets rid of this disadvantage by making the third aperture a bent tube, shown at *d*. The apertures in the stop-cock itself are pierced through diagonally, so that if one is in use the operator is certain that the other is out of communication, and, as will be seen from figure C, there is little difficulty in noticing when the nitrometer is closed. In using the nitrometer for measuring gases, which are generated in a second apparatus, as in, for example, the estimation of peroxide of hydrogen, urea, carbonic acid, &c., the decomposing bottle is connected with the bent tube *d*, in the position A; after that the stop-cock is turned for a moment into position B, in order to put up the mercury or water to zero, and turned back to A, after which the analysis can begin.

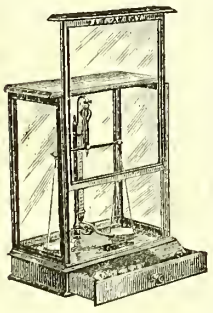
The next exhibit (794) by **William Hume**, of Edinburgh, is a very varied one, of a similar nature, put down as "scientific instruments and apparatus for research, teaching, and technical purposes." Sets of apparatus for educational purposes are prominent in the case, but there are several specialities exhibited, such as a large new laboratory microtome for cutting sections under spirit, a new projection microscope for lime light, and some very nice apparatus and instruments for bacteriological research. The whole exhibit would be made much more interesting if the more unusual portions of it were labelled. As it is, visitors can doubtless admire the

superior finish of the glass and metal apparatus, but they have little to fix the purpose of it on their memory.

The show of balances is by no means extensive; the two firms already named have as agents one or more in their cases, but **Mawson & Swan**, and **W. & T. Avery** are the only exhibitors who are particularly prominent in the department. Mawson & Swan, 11–15 Mosley St., Newcastle-on-Tyne, show at Stand 807 a number of balances made by Herzberg, the successor of Paul Bunge. These are on the short-beam principle, and are wonderful examples of mechanical skill. The peculiarity of these balances is that the metal used in their manufacture is, unlike steel, little liable to oxidation; and the edged parts are made of exceedingly hard metal. Moreover, by the introduction of rollers, the adjustments of the beam, the hangings, and the pans work remarkably smooth, and prevent any possibility of the axes sliding out of their position. The bases upon which the balances are secured are, in all cases, of glass or marble. These balances are used chiefly for weighings which have to be made with great exactitude, and the better of them are so arranged that weighing in vacuo can easily be performed with them. Mawson & Swan's case also contains accurately graduated burettes, Stead's gas-analysis apparatus, and their new pattern hydrometer, which is shown in the figure. The bulb of this, it will be seen, is of a special wedge-shaped construction, and has ridges on each side which strengthen the bulb, prevent the instrument revolving in the liquid, and rolling when laid down. These advantages can be appreciated by those who have much working with hydrometers. For W. & T. Avery's exhibit we have to go to Stand 14, Court XVIII.—the bulk of the exhibit being heavy weighing-machines and weighbridges used in agriculture, the department to which the court is devoted. The portion of the exhibit which is interesting to our readers comprises chemists' counter and dispensing-scales, and analytical balances. There are several kinds of dispensing-scales

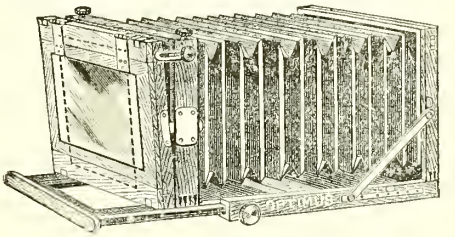


shown. That figured above is a "dispensing-scale" for dispensing and laboratory use. It has stirrup-pans, brass pillar, and long indicator, and may be taken to pieces and packed in the mahogany box when not in use. The same scale is supplied in a mahogany glass case. An apparatus similar in principle is shown in the next figure. This, it will be seen, is of the reliable sliding-pillar type, which works with a lever. The pans (made of metal or glass) are suspended with silk cords, and the knife-edges and bearers being well made, the balance is very delicate and suitable for fine dispensing weighings or ordinary laboratory work. The drawer is fitted with brass knob weights, 1,000 to 10 grains, and German silver weights, 5 grains to $\frac{1}{10}$ grain. Druggists' counter machines are also shown on mahogany box with drawer for small weights; also small apothecary's scales with brass, glass, and porcelain pans, in boxes, with weights complete. Returning again to Court VII., the visitor will be able to spend a profitable quarter of an hour at the stand of **James White**, 209 Sauchiehall Street, Glasgow, at which are shown many inventions in navagational and electrical instruments, which are the product of the fertile brain of Sir William Thomson. These have little connection with pharmacy, but the applications of science are always interesting to the pharmacist, and for that reason this exhibit has a special claim upon him.

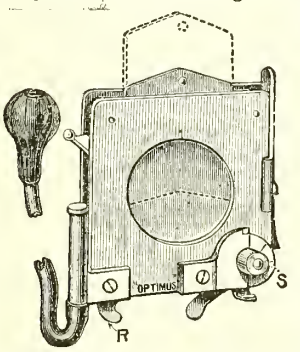


Photographic and Optical Instruments.

Photography and the trades allied to it are fairly well represented in the exhibition; indeed, there are special galleries of photographs in which many beautiful examples of the art may be seen. On the whole, however, the Exhibition is not fully representative of the principal manufacturing houses, a fact probably due to the recent exhibition at the Crystal Palace, as well as to the absence in the case of this exhibition of any inducement in the shape of rewards, for the committee have determined not to give medals. The principal exhibitors in the department are **Perkin, Son & Rayment**, of 99 Hatton Garden, E.C. Their exhibit at Stand 811, Court 7, consists chiefly of cameras and lenses. The cameras are of very varied sizes, ranging from the one capable of taking a plate 2 feet square to the tiny quarter-plate instrument which beginners are so fond of handling. One camera which struck us as being very serviceable is that which the firm designates the "Optimus," with extra long focus, the construction of which is shown in the following figure. This instrument is suitable either for



field or studio work. The folding bottom board has an inner telescopic frame which racks out, thus giving the great length of focal adjustment which characterises the camera. It is fitted with double swing back, horizontal and vertical fronts, and may be used either for oblong or upright pictures. The demand, which has lately become almost universal, for large photos has tried considerably the patience of photographers who have small studios, and for such Perkin, Son & Rayment have designed a camera, the "Optimus Universal," which, on account of the double length of bellows, gives the desired size of picture. The exhibit is strong in lenses of all sizes, this department being one which the firm has attained great excellence in, and secured the approbation of many leading amateur and professional photographers throughout the kingdom. Our next figure shows a new plunge shutter, which is shown in the case, and which we had the opportunity of seeing in action. As will be seen, this is a pneumatic shutter, and it may either be fitted on the hood or between the lenses of a doublet. It addition to being one of the most portable shutters, it is capable of giving long or short exposures at the will of the operator, and this without a particle of vibration. The case also includes a number of magic lanterns. At Stand 809 **Ross & Co.**, 112 New Bond Street, W., make a very interesting exhibit of optical instruments which is well worth careful inspection. The instruments, chiefly microscopes and telescopes, are of a high-class character, and include Wenham's Radial microscope stand, which is capable of moving the body in any direction, the movements being at the same time measured. Photographic apparatus is also shown in this case, and at Stand 808 we have another collection of similar apparatus exhibited by **M'Ghie & Bolton**, Gresham House, 47 West Nile Street, Glasgow.



(To be continued.)

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., July 12

WE have no improvement of any consequence to report in the drug and chemical markets. No doubt the unseasonable weather is greatly responsible for the prevailing lack of animation, but, leaving even this factor out of consideration, the fact remains that there is no inclination whatever for any but a hand-to-mouth business. To-day's drug sales were among the slowest and least interesting ever held, and the alterations established few and unimportant. Ipecacuanha is a little dearer, and cardamoms, though irregular, sold generally well. On the other hand, calumba, annatto seed, caraway seed, ergot of rye, dragon's blood, gum kino, nux vomica, castor oil, rhubarb, squills, and ordinary vanilla beans all sold at more or less cheaper rates. Essential oils of peppermint, bitter almond, and anise are very firm, and not unlikely to improve in value. In the chemical market there are very few changes to report. Citric and tartaric acids are just a shade firmer, and there has been an abortive splutter in quinine, while quicksilver and cream of tartar are a trifle easier. Shellac is a shade lower. Cloves, Jamaica ginger, and wild Bombay mace have also fallen in value. The crop of vegetable drugs in France and Germany is reported to have suffered more or less from cold and too abundant rains, and the yield of many important drugs, especially in France, will in all probability be a small one.

ACID (CITRIC) still remains at 1*s.* 7*d.* per lb., but there is very little business doing. In Sicily more money has been paid for lemon-juice, 20*l.* 5*s.* being now asked. Mr. G. Ainis writes to us from Messina, under date of July 7:—"Orders for immediate shipment have hardened the market. Nevertheless, the present position of the article is to be considered as temporary, for there are offers for forward deliveries at 2*l.* per pipe under the prompt; and, moreover, the stock of above 1,000 pipes, and the fair prospects of the new crop, suggest lower prices."

ACID (TARTARIC) a little firmer, *English* at 1*s.* 6*d.*, foreign at 1*s.* 5⅝*d.* to 1*s.* 5¾*d.* per lb.

ALOES.—Two parcels were offered as *Barbadoes* aloes, one consisting of 169 bold gourds, partly of even brown colour and fair flavour, which were bought in at 100*s.* per cwt., and partly of very ordinary Capey, for which 15*s.* per cwt. was paid. Of *Cape* aloes, represented by 12 cases, 5 were sold, good hard bright, slightly wormy, at 20*s.* 6*d.* per cwt. *Curaçaos*, though in pretty large supply (356 packages), met with scarcely any attention; good brown livers sold at 107*s.* 6*d.* to 112*s.* 6*d.*, medium at 87*s.* 6*d.* to 90*s.*, and common dark at 30*s.* per cwt. *Zanzibar* and *Socotrine* aloes are liberally offered, and 17 cases of the former, soft red, of sour flavour, sold at 100*s.* per cwt.

AMBERGRIS.—To-day's auctions included a few tins of fine grey ambergris, which has been extremely scarce lately, and for which high prices are required. At from 100*s.* to 105*s.* per oz. these lots were nominally bought in.

ANISE remains cheap, and in many quarters a desire is shown to purchase at the low values now ruling. At auction a small parcel stony *Russian* anise realised 19*s.* 6*d.* per cwt., but for fine quality as much as 25*s.* to 26*s.* is paid privately. *Italian* still quotes at 40*s.* per cwt. for good; *Spanish* (Alicante) at 50*s.* per cwt. *Star anise* is very scarce, and nothing seemes to be coming forward. At the auctions to-day 82*s.* 6*d.* to 85*s.* per cwt. was named as the price for a parcel of rather dark and broken seed. Forty-nine bags false (*Japanese*) star anise, imported in 1882, were also offered and 17*s.* per cwt. solicited, but no bids were made.

ANNATTO.—It is very doubtful whether the present prices will induce shippers to send us any further supplies. One parcel of fair Ceylon *seed* sold at 1*d.* per lb. Brazilian *roll* neglected; 11*d.* per lb. would now be taken for some lots which have been offered repeatedly.

BUCHU.—Prices remain extremely low, 2*d.* per lb. being asked for fairly good greenish round leaves. Long leaves, dark green and rather stalky and broken, are held at 4*d.* per lb., an offer of 3*d.* per lb. being refused.

CALUMBA.—A large quantity of common root and pickings was again offered to-day, and 216 bales very common blackish sold at 4*s.* 6*d.* to 6*s.* 3*d.* per cwt. Fairly good root, mixed with yellow but slightly wormy, is held at 15*s.* per cwt.

CAMPHOR.—The market for *Crude* camphor remains firm, but privately little business has been done. At auction to-day 111 cases, rather dark China, sold at 70*s.* per cwt. *Refined* camphor unchanged.

CANARY SEED.—There has been a display of more activity on our market. It is said to have been discovered that many of the Continental countries have only very short provisions to fall back upon, and London is now resorted to as the cheapest market. Our own stocks also continue small as long as fresh supplies are next to nil; the only movement of any consequence is the greater pressure of Dutch seed, which is now obtainable at very moderate rates. The prospects of the new Dutch crop are not spoken of as very promising, while from Turkey reports continue good, at least with respect to quality; nothing reliable is to be heard yet about the yield. Supplies of home-grown seed are getting smaller, and hardly anything fresh comes to hand from Spain. *Turkish* seed quotes at 41*s.* to 43*s*, cleaned, 45*s.* to 47*s.*; *Dutch*, 41*s.* to 49*s.* per 464 lbs.; *English*, 40*s.* to 44*s.*; *Morocco*, 48*s.* to 50*s.*; *Spanish*, 52*s.* to 53*s.*

CANTHARIDES.—*Chinese* flies neglected, and lower in value. Six cases ordinary dusty and broken sold to-day at 11*d.* per lb.

CARAWAY SEED.—Prices have again receded, large quantities of old *Dutch* seed still pressing heavily on the market. The *Russian* crop is now generally said to have failed altogether. At auction 15 bales common seed sold "without reserve" at 15*s.* 6*d.* per cwt.; privately, up to 22*s.* per cwt. is asked for fine *Russian*, and 24*s.* 6*d.* for ditto *Dutch*.

CARDAMOMS.—Altogether 184 packages were offered for sale to-day, but the proportion sold was smaller than usual, several holders preferring to keep back their parcels at rates above those now current. Prices were somewhat irregular, as usual, but on the whole very steady, with a tendency upwards. *Ceylon Malabar*, pale and plump, medium size, slightly specky, sold at 1*s.* 9*d.* per lb.; fine bold ditto, partly split, also at 1*s.* 9*d.* per lb. (a very cheap parcel); fair bold brown, 1*s.* 5*d.* to 1*s.* 7*d.*; small to medium plump yellow, 1*s.* 2*d.* to 1*s.* 4*d.*; split pods and husks, 1*s.* 1*d.*; very small, 9*d.* per lb. *Mysore*, fine pale smooth, medium size, 2*s.* 2*d.* to 2*s.* 4*d.*; medium pale longish, 1*s.* 6*d.* to 1*s.* 7*d.*; small to medium fair colour, 1*s.* 5*d.*; yellow split, 1*s.* *Tellicherry*, fair bold brown, 1*s.* 2*d.* to 1*s.* 4*d.* *Mangalore*, ordinary small mixed brownish smooth skin, 1*s.* 3*d.* to 1*s.* 5*d.*; common seed, 1*s.* per lb. The shipments from Ceylon in the periods between October 1 and June 14 have been as follows: 1887–8, 263,089 lbs.; 1886–7, 258,917 lbs.; 1885–6, 197,159 lbs.

CINCHONA.—The usual assortment of South American barks was offered to-day, and showed no special features. Crown bark seemed rather dearer, 10*d.* being paid for fair thin rusty M.O.Z. quill. Ten bales cultivated *Calisaya* in thin flat pieces, rather dark, were bought in at 1*s.* 6*d.* per lb. Several packages ordinary very dusty flat *red* bark are in the market at 1*s.* 3*d.* to 3*s.* 3*d.* per lb. according to quality. Another parcel of 88 bales flat Calisaya bark, very broken, was bought in at 2*s.* 2*d.* per lb., only two damaged lots selling at 1*s.* 9*d.* per lb. The shipments from Ceylon in the periods between October 1 and June 14 are given as follows: 1887-88, 8,383,088 lbs.; 1886-7, 10,478,408 lbs.; 1885-6, 11,799,118 lbs.

COLOCYNTH.—A consignment of 37 packages *Turkish* colocynth, fair peeled but broken and seedy apple, was shown. Part of this was said to be sold before auction, the rest was bought in at nominal prices. Six cases whole

Unpeeled seedy apples *viâ* Bussorah were bought in at 4*d.* per lb.; ditto seedy pulp, at 5½*d.* per lb.

CONDURANGO.—Sixteen bales fairly good but rather broken bark were sold to-day at 1*s.* to 1*s.* 3*d.* per lb. We understand that a Hamburg firm are offering "genuine Mataperro condurango," shortly due from Guayaquil, on the basis of 1*s.* 1*d.* per lb., taken in London, for lots of at least 5 cwt.

COTO BARK.—Five bales (about ½ ton) true coto, of cinnamon-like odour and pungent taste, recently imported from Bolivia, but rather sea-damaged in transit, were bought in at 1*s.* 9*d.* per lb., no bid being made at auction. There has been none of this bark offered for some time. Some years ago it came into repute as a specific for Asiatic cholera, and the demand for it brought into the market a substitute—para-coto bark—which, however, differs from the true bark in having a much less pungent taste and an odour of nutmeg instead of cinnamon.

CREAM OF TARTAR quiet, and still held at 116*s.* per cwt. for white firsts, but with a tendency to further weakness. Seconds, 113*s.* to 112*s.* 6*d.* per cwt.

CUMIN SEED quiet. The new Malta crop offers at low figures. At auction several parcels were shown, but there was little demand. For good seed 42*s.* 6*d.* is asked.

CUTTLE FISH.—Fine bold white bone is still scarce. Several cases were shown to-day, fair but broken pale being bought in at 1*s.* nominally; darkish at 5*d.* to 6*d.* per lb. Only a few cases small dark bone sold at 8*d.* per lb.

DRAGON'S BLOOD in small supply. Nine cases soft partly seedy lump, of fine fiery colour, sold very cheaply indeed, at 6*l.* 10*s.* to 6*l.* 17*s.* 6*d.*, or from 7*s.* 6*d.* to 15*s.* below valuation.

ERGOT OF RYE.—The probability that new ergot may presently appear on the market has led several holders to offer parcels at to-day's auctions. Some lots sold at a considerable decline, others were bought in at nominal prices, but the tendency is decidedly weaker. Forty-five bags *Russian*, all more or less mouldy, sold at 5*d.* to 7½*d.* per lb., and some fair but lean *Spanish* at 1*s.* per lb. For good Spanish 1*s.* 2*d.* to 1*s.* 4*d.* per lb. is nominally asked.

FENUGREEK SEED very firm, with a demand fully equalling the somewhat restricted supply. Fine *Mogadore* seed is worth 9*s.* per cwt.; *Egyptian*, 6*s.* 9*d.* to 7*s.* per cwt.

GALANGAL.—More money has recently been paid for this root privately. At to-day's auctions 130 bags sea-damaged sold at 7*s.* 6*d.* per cwt.

GAMBOGE unchanged. Little offering. Seven cases fine loose pipe, good orange fracture, were bought in at 15*l.* nominally, white of 5 cases blocky ricey pipe of indifferent colour, one was sold at 11*l.* per cwt.

GENTIAN ROOT remains steady, from 16*s.* to 16*s.* 6*d.* per cwt. being paid for fairly good root. For two cases English ground powder, "guaranteed pure," an offer of 21*s.* per cwt. was refused, 27*s.* being named as the price.

GUM AMMONIACUM.—Two cases good bold to small pale drop were bought in at 35*s.* per cwt.

GUM ARABIC.—Fine *Turkey* gums remain extremely rare, and are held at extraordinary prices. At auction one case small pale pieces, presenting the appearance of having been "made up," was sold at 14*l.* 10*s.* per cwt. *White Mogadore* gum sold at extreme rates, viz., 8*l.* 12*s.* 6*d.* for good frosty sorts, while 8*l.* 7*s.* 6*d.* was refused for another lot. Dull broken glassy *Cape* gum sold at 64*s.*, fair siftings at 37*s.* per cwt.

GUM BENJAMIN.—Four cases Siam gum, bold blocky almonds of good colour, sold at 20*l.*, a parcel of common blocky grain being bought in at normal rates. Ordinary *Palembang* gum was also offered, but all bought in. *Penang.*—Good but old and discoloured II almonds, brown corners, sold cheaply at 8*l.* 2*s.* 6*d.* to 8*l.* 5*s.*, while an offer of 8*l.* 10*s.* was refused for a better lot, for which 9*l.* is asked.

GUM KINO again slightly cheaper. Ten cases good bright sold "without reserve" at 29*s.* to 30*s.* per cwt., while 4 cases dull quality were bought in at 33*s.* per cwt. nominally.

GUM MYRRH unaltered and without demand. For good sorts 90*s.* per cwt. is asked.

HONEY.—Good amber partly candied *California* is held at 36*s.* per cwt., an offer of 1*s.* being refused. Good liquid brown *Jamaica* sold at 24*s.* per cwt.

IPECACUANHA.—Notwithstanding the recent arrival, part of which was included in the 40 packages offered to-day, there was a very good demand, and the brokers succeeded in disposing of nearly the whole of their supply at an advance of 2*d.* to 3*d.* per lb. Very fine stout root sold at 6*s.* 9*d.* per lb.; fairly good to good stout, more or less damaged, 5*s.* 11*d.* to 6*s.* 3*d.*; damaged and mouldy, 6*s.*, and lean pickings, 4*s.* 9*d.* per lb.

LIME-JUICE.—Twenty-five packages from Montserrat, mostly mucilage, were withdrawn, only 11*d.* per gallon being offered.

LIQUORICE ROOT.—Fifty-four bags of root were bought in. The quality may be judged by the fact that only 1*s.* per cwt. was offered, which was refused as insufficient to pay the charges. Two packages English ground powder, "guaranteed pure," were bought in at 26*s.* per cwt.

MATICO.—Twenty-five bales black cakey leaves and stalk were bought in at 3*d.* per lb. No offers.

MUSK.—First pile *Tonquin* pods were in good supply, but met a very restricted demand, and only a few caddies sold at unchanged prices. Of six tins fine pods, blue skin and underskin, medium to very bold, slightly damp, well-trimmed, only one was disposed of at 80*s.* per oz. A few tins of old-fashioned small to bold, fairly dry pods, with skin and underskin, sold at 75*s.* 6*d.* to 76*s.* per oz. Good but damp and broken third pile (adulterated), thin-skinned pods, sold at 43*s.* to 44*s.*; common wet and untrimmed at 17*s.* 6*d.* per oz. Empty pods brought 3*s.* 5*d.*, and trimmings 9*d.* to 11*d.* per oz. Dry, but very small and skinny, Chinese *Cabardine* sold at 17*s.* per oz.; and five bottles "*Grain musk*" at 8*s.* to 8*s.* 6*d.* per oz.

NUX VOMICA again cheaper. Eighty bags newly imported, small but fair sale; silky, slightly dark mixed, sold at 9*s.* per cwt.; darker at 8*s.* per cwt.

OIL (CASTOR).—For some time Coconada oil and Calcutta seconds have been extremely difficult to sell, and under these circumstances a heavier decline might have been expected than did actually occur to-day, and which was only ⅛*d.* per lb. About 400 cases were sold, mostly "without reserve," at 2⅜*d.* to 2½*d.* (one lot at 2¼*d.*) for rather yellow mixed *Calcutta seconds*; 2⅜*d.* for fair ditto imported in 1880; 2¼*d.* for fair *Madras* (1883 import); and 2½*d.* for ditto *Coconada.* For first Calcutta 4*d.* per lb. is still asked.

OILS (ESSENTIAL).—*Star anise* quiet, and since the recent sale, when 6*s.* 5*d.* per lb. was reported paid, no further business has transpired. Oil from Russian seed is cheap at present, and may possibly advance consequent upon the improvement in the Russian exchange. *Bitter almond* oil is scarce and dear, and higher prices may shortly rule on account of the growing scarcity of the crude material. Good *Cajuput* oil was bought in to-day at 2*s.* 4*d.* *Cinnamon* oil quiet. Ordinary quality may be had at 8*d.* per oz., but for fine strong oil 2*s.* per oz. is asked. The Ceylon shipments (including leaf oil) from October 1 to June 14 are: 1887-8, 107,293 oz.; 1886-7, 52,505 oz.; 1885-6, 89,248 oz. *Citronella* neglected at ⅞*d.* to $\frac{15}{16}$*d.* for native brands. The Ceylon exports are enormously heavy. *Lavender* is becoming more and more scarce in France. *Lignaloes* (Mexican): 26 10-lb tins taken out at to-day's auctions. *Otto of Rose*, the crop has not been quite so large as last year's as regards quantity, but the quality is said to be fine. Prices have not been fixed yet. *Peppermint.*—Japan quiet. American HGH quoted at 12*s.* 9*d.*, and firm thereat. At auction to-day 40 cases were shown, but bought in, and 9 cases common "Newark, Wayne Co." bulk oil were also bought in at 9*s.* 6*d.* per lb.

OIL (OLIVE).—Dull, at 37*l.* for *Spanish* nominally, 33*l.* 10*s.* to 34*l.* for *Sicilian*, and 32*l.* to 32*l.* 10*s.* for *Mogadore.* From Messina we hear, under date of July 7, that the local market is firmer, and that higher prices have been paid to cover previous sales falling due. The cause of the advance is to be found in the want of arrivals from the Calabrian coast, but it is not thought that the present stiffness will last long.

ORRIS ROOT.—One bale fine white trimmed *Florentine* root sold at 46*s.* per cwt., and 18*s.* was refused for 7 serons brown *Mogadore.*

PATCHOULY LEAVES.—Considerable quantities have arrived lately, and several lots rather common leaves were offered at to-day's auctions. For one of these of 13 bales greenish leaves, without stalk, but of peculiar appearance, 6*d.* per lb. was suggested.

QUASSIA.—About 1½ tons chips were offered, but remained unsold. The price asked is 10*s.* 6*d.* per cwt.

QUICKSILVER.—The importers have made no alteration in their price of 8*l.*, but second-hand holders are a little weaker, and offer at 7*l.* 12*s.* An alteration in the official price at an early date does not appear unlikely. At the end of last month the stock in London was estimated at 64,000 bottles, against 65,000 bottles on June 30, 1887. *Mercurials* unaltered.

QUININE.—Early in the week a rather considerable business took place in B & S quinine, both on the spot and for August-September delivery, at 1*s.* 5*d.* per oz., and on Monday 1*s.* 5½*d.* per oz. was actually paid, it is said, for a small lot; but there is no backbone in the movement, and it has been a very short-lived one. The market closes much quieter, with sellers of German bulk quinine at 1*s.* 5*d.* per oz., but no buyers at that price. The English makers have not varied their quotations.

RADIX ALTHÆÆ.—The *Belgian* root has not experienced any change in price, but *German* root is becoming very scarce, and cheap varieties fail almost entirely. The spring diggings, never very important, have been exceptionally small this year, and there is no stock left of these. The first arrivals of the autumn diggings do not generally take place before January, and prices are pretty certain to advance before that time.

RHUBARB.—A rather heavy quantity, viz. 154 cases, was offered for sale to-day. The bulk was bought in, but a good many lots sold at very low prices, frequently several pence below the valuation. *Shensi* root, bold flat fair orange coat, half pinky fracture, at 1*s.* 9*d.*; small to medium flat, fair pale coat, partly rough, three-quarter pinky-grey fracture, 1*s.* 4*d.*; darker ditto, 1*s.* 2*d.*; small round fair orange coat and partly pinky fracture, 10½*d.* to 11*d.*; very wormy, 9*d.*; common and rough pickings, 6½*d.* to 7*d.* per lb. *Canton* root, small round fair coat, half dark fracture and wormy, 9½*d.* to 10*d.*; *High-dried* dark and wormy, 9*d.* to 10*d.* per lb.

SARSAPARILLA unchanged, with sales of 10 bales damaged *Guayaquil* at 10½*d.* per lb. (a cheap lot), while 1*s.* was refused for sound root. 24 bales grey *Jamaica* sold at 1*s.* 9*d.* to 1*s.* 11*d.* for sound, and 1*s.* 7*d.* for damaged root.

SCAMMONY.—About 1½ cwt. sold at the following prices to-day:—31 lbs. (79·12 per cent. resin sol. in ether), 19*s.*; 23 lbs. (77·08 per cent.), 18*s.*; 47 lbs. (79·10 per cent.), 17*s.*; and 43 lbs. (74·11 per cent.), at 16*s.* per lb.

SENEGA quiet, but steady, at 1*s.* 9*d.* per lb. for good bright root.

SENNA unaltered. The 214 packages offered included very little of good quality, and most of the ordinary second-hand lots remained unsold. One fine lot of bold green Tinnevelly leaves fetched 9½*d.* per lb.; common 1½*d.* to 1¾*d.* per lb. Large *Alexandrian* leaf is held at 1*s.* 6*d.*, small broken at 11*d.*, and siftings at 8*d.* per lb.

SHELLAC.—At the weekly auctions a rather large supply, viz., 968 cases, was offered, but only 180 of these were sold, most of the holders showing no inclination to meet the market, while the sellers had to accept a reduction of about 6*d.* on *Second orange*, which sold as follows:—Worked, flat and reddish at 43*s.*; common weak livery, 41*s.*; unworked, fine but out of condition (SD in circle), 53*s.*; fair flat red, 43*s.* *Garnet*, worked AC blocky, realised 33*s.* 6*d.* to 34*s.*, and *Button*, dark, 38*s.* 6*d.* Since the auctions the market has remained stagnant. Second orange TN is quoted at 44*s.* 6*d.* on the spot, and at 45*s.* 6*d.* for August delivery. The exports of shellac, including button, from Calcutta to Europe and the United States for the first five months of the last three years are given as follows:—

		U.K.	Continent	U.S.	Total
1888 ..	.. cwt.	48,650	6,689	8,605	63,944
1887 ..	.. „	55,175	14,490	24,992	94,657
1886 ..	.. „	42,977	10,704	11,798	65,479

SQUILLS.—Old are cheap and neglected, as the new are coming in. Several lots were offered to-day, but only a few sold, ordinary damaged to fair pale, 1*d.* to 2½*d.* per lb.

VANILLA.—200 tins were partly sold to-day, including a large proportion of common pods and salvage, which went at very low prices. Common brown uncrystallised oily, 5½ to 8 inch, 6*s.* 6*d.* to 9*s.* 3*d.*; dry foxy and brown, 5½ to 8 inch, 2*s.* 6*d.* to 6*s.* 6*d.*; very low, 7*d.* to 1*s.* 9*d.*; good, 7 to 7½ inch, slightly crystallised, 15*s.* 6*d.*; salvage, 1*s.* 6*d.* to 4*s.* 3*d.* per lb.

WAX (BEES') in pretty large supply, and selling at previous rates. *Jamaica*, good red, 6*l.*; orange and brown, 5*l.* 10*s.*; grey, 5*l.* 5*s.* to 5*l.* 7*s.* 6*d.* Good pale *Madagascar* held at 85*s.* and *Mogadore* at 80*s.*

WAX (JAPAN).—From 48*s.* to 48*s.* 6*d.* per cwt. is asked for good palish squares. Some very common wax was shown to-day, and bought in at a nominal price.

THE AMERICAN MARKETS.

NEW YORK, June 26.

THERE is little of interest to note this week in the way of trade, but plenty of political excitement caused by the nomination of candidates for the Presidency on the Republican side, which has now been made. The future, for several months at least, will be taken up with the campaign and election, and in the meantime business will be more or less neglected—at least, a dull season is generally charged to that cause. At present we are having extremely hot weather for the time of the season, and this has a tendency to retard business; so with the various excuses or drawbacks we do not look for a very lively trade for the balance of the year.

ACID (CITRIC).—*Foreign* is in good supply, and the price is now on a parallel with the American manufacturers', viz., 50c., less 10c. duty (1*s.* 8*d.*). The Americans are making their deliveries on contracts pretty freely at same figures.

BALSAM COPAIBA.—Freer arrivals of *Central American* have taken place of late, and the increased supply has reduced the price to 46c. (1*s.* 11*d.*). Other grades, however, are unchanged.

BROMIDE OF POTASSIUM still continues at former figures—33c. (1*s.* 4½*d.*) for lots of 1,000 lbs. and over.

CARBONATE (AMMONIA), 7½c., duty 20 per cent. (3⅛*d.*).

CARDAMOMS continue at about the same figures as for some time past: *Alleppys* are selling at from 45c. to 60c. (1*s.* 10½*d.* to 2*s.* 6*d.*), according to quality; *Malabar*, 50c. to 70c. (2*s.* 1*d.* to 2*s.* 11*d.*); and *Mangalore*, 60c. to 90c. (2*s.* 6*d.* to 3*s.* 9*d.*); demand moderate, and supply good.

CHAMOMILES.—*German.*—Some small lots of the 1888 crop have arrived, and sold as low as 24c. (1*s.*) for quite handsome flowers.

CHLORATE OF POTASH, 14c. to 14½c. per lb., duty 3*d.* per lb. (5½*d.* to 5¾*d.*), for prime well-known brands. If anything this article is a little weaker, though there is a good demand by the fireworks men, an unusual consumption being, in fact, looked for this year, on account of the increased demand for fireworks for both the national and the political celebrations, and the decline is only to be accounted for by excessive importations.

CUBEBS continue firm at the advanced prices: stemless $1.75 (7*s.* 3½*d.*), and ordinary stemmy at $1.50 (6*s.* 3*d.*) per lb.

ENGLISH CHEMICALS are quiet, in fair demand, and at fair average prices: *Bleaching powder* in large lots $1.90 (7*s.* 11*d.*) per 100 lbs.; *Soda ash*, 48 per cent., $1.25, duty ¼c. per lb. (4*s.* 2*d.*), per 100 lbs.; *Sal soda*, $1, ¼c. per lb. duty (3*s.* 1½*d.*); *Caustic soda*, $2.25 to $2 50, as to strength, duty 1c. per lb. (5*s.* 2½*d.* to 6*s.* 3*d.*), per 100 lbs.; *Soda bicarbonate* in kegs, 3¼c. per lb., 1½c. per lb. duty (7*s.* 3½*d.*), per 100 lbs.

NITRATE OF BARYTA, 9¼c. (3⅛*d.*), duty 25 per cent.

NITRATE OF STRONTIA, which is a firework chemical largely consumed here also, is firm at a slight advance to 10c. to 10½c., in kegs, as to quantity, duty 25 per cent. (4*d.* to 4¼*d.*).

OILS (ESSENTIAL).—*Peppermint* firmer: Western in tins, $2.10 (8*s.* 9*d.*); New York State, $2.25 (9*s.* 4½*d.*); and H.G.H., $2.65 in bottles (11*s.*). The tendency of this article is higher, through rumours of a considerable injury to the plant during our unusually severe winter. *Wintergreen* continues unchanged, $1.75 (7*s.* 3½*d.*); *Sassafras*, 47c. (1*s.* 11½*d.*); *Pennyroyal*, 90c. (3*s.* 9*d.*).

QUININE is offering lower: 32c. (1*s.* 4*d.*) for good brands; demand fair, but the supply still much larger, which keeps it very much in the buyers' favour.

ROOTS.—*Senega*, 35c. to 42c. (1*s.* 5½*d.* to 1*s.* 9*d.*), according to quality; *Golden seal*, dull and about former normal figures, 40c. (1*s.* 8*d.*).

SHELLAC dull and unchanged.

SPERMACETI—Blocks, 31c. (1*s.* 3½*d.*); cakes, 32c. (1*s.* 4*d.*).

THE DUTCH CINCHONA AUCTIONS.

(*Telegram from our Correspondent.*)

AMSTERDAM, July 12.

AT the periodical auctions of cinchona bark held here today a total of 1,509 packages was offered. Of this quantity 1,486 packages were sold with fairly good competition at a slight advance, the unit averaging 10c. to 11c. per ½ kilo., or 1½*d.* to 2*d.* per lb. Druggists' bark in quills, broken quills, and chips fetched from 16c. to 61c. per ½ kilo. (3*d.* to 11*d.* per lb.); ditto root, 21c. per ½ kilo. (3¾*d.* per lb.); manufacturers' barks, quills, broken quills, and chips, 9c. to 86c. per ½ kilo. (1¾*d.* to 1*s.* 3*d.* per lb.); and manufacturers' root from 25c. up to 76c. per ½ kilo. (4½*d.* to 1*s.* 1½*d.* per lb.). The principal buyer was the Auerbach Quinine-Factory, the Amsterdam Quinine-works coming second.

CHEMICALS IN THE NORTH OF ENGLAND.

DURING the past week there has been very little change to mention in the chemical market. Shipments of most descriptions have been about the average, but generally these have been in execution of past orders, and the inquiries for prompt and future deliveries have only been of a limited character.

ACIDS.—*Tartaric* meets with a decidedly better demand, and prices are gradually hardening. A fair business has been done here at 1*s.* 5¾*d.*, and holders are not disposed to sell forward under this price. *Citric* is also very steady, and has been in fair request for export at 1*s.* 7¼*d.* Orders for *Oxalic* at 3*d.* continue to come in, and this article is now in a decidedly stronger position. *Boracic* continues neglected, and weakness on the part of sellers in Leghorn is affecting holders here. Buyers decline to contract forward, and the value on spot is to some extent nominal at 24*s.* to 24*s.* 6*d.* per cwt.

ALUM continues to move off, and orders are coming in of greater weight, both for ordinary and Turkey red; prices are very firm for the former at 4*l.* 15*s.* to 4*l.* 17*s.* 6*d.* according to packages. The demand for *Sulphate of alumina* has been less active for shipment, but there is no change in values. *Aluminoferric cake*, however, has been in request, and is selling freely at 3*l.* 2*s.* 6*d.* per ton.

AMMONIA SALTS.—*Salammoniac* continues in fair request, chiefly for export, and prices closed firmly at 34*s.* for first and 32*s.* per cwt. for second quality. *Muriate* is firm, and American orders are coming in. Values range from 23*l.* to 30*l.* per ton, according to colour and strength. *Carbonate* continues to move off at 3*d.* per lb., but *Sulphate* has again declined, the closing price being 11*l.* 10*s.* per ton. For forward contracts, however, there is more inquiry.

METAL BASES.—*Sulphate of copper*, affected by the position of copper, is weak, and closes flat at 20*l.* per ton. *Acetates of lead* have been very dull, white at 25*l.* to 25*l.* 10*s.*, and brown at 20*l.* 10*s.* per ton. *Tin preparations* are firmer, and in more request. *Copperas* also has been in fair request at 32*s.* 6*d.* per ton for Welsh, and 36*s.* per ton for Lancashire.

BOARD OF TRADE RETURNS.

IMPORTS	June, 1886	June, 1887	June, 1888
Drugs, unenumerated .. value £	61,955	41,784	54,075
Chemical manufactures and products, unenumerated .. "	114,696	107,365	116,190
Chemicals and dyestuffs, unen. "	205,610	143,782	204,397
Oils, not enumerated .. "	89,818	102,148	109,019
Alkali .. .. cwt.	8,241	6,953	4,882
" .. .. .. value £	6,342	6,581	4,551
Brimstone .. .. cwt.	68,292	40,900	75,524
" .. .. .. value £	16,234	10,182	16,698
Nitrate of soda .. .. .. cwt.	145,891	172,218	193,292
" " .. .. value £	67,287	80,391	73,226
" of potash .. .. .. cwt.	24,742	17,879	25,749
" " .. .. value £	21,674	16,005	22,159
Quicksilver .. .. .. lbs.	684,741	877,500	1,117,650
" .. .. .. value £	62,160	76,825	113,074
Cinchona bark .. .. .. cwt.	16,281	12,836	10,004
" " .. .. value £	91,590	69,933	31,177
Gum Arabic .. .. .. cwt.	2,743	2,983	7,867
" .. .. .. value £	9,796	12,499	30,509
Lac, seed, shell, stick, and dye cwt.	8,153	10,873	8,589
" " " " value £	22,871	27,732	20,358
Cinnamon .. .. lbs.	8,490	35,719	4,200
" .. .. .. value £	129	692	196
Ginger .. .. cwt.	18,237	22,148	13,252
" .. .. .. value £	36,752	40,755	24,591
Pepper .. .. lbs.	961,131	936,539	2,136,024
" .. .. .. value £	25,681	33,359	66,035
Bark (for tanners' or dyers' use) cwt.	72,037	55,118	34,030
" " " " value £	44,130	28,017	17,104
Aniline .. .. "	15,393	24,299	17,430
Alizarine .. .. "	19,557	14,195	16,060
Other coal-tar dyes .. .. "	—	464	1,629
Cochineal .. .. .. cwt.	989	585	229
" .. .. .. value £	6,395	3,542	1,442
Cutch and gambier .. .. tons	1,273	1,931	1,058
" " .. value £	28,151	42,212	28,407
Indigo .. .. cwt.	2,270	3,357	2,359
" .. .. .. value £	37,025	57,662	41,705
Madder, madder root, &c. .. cwt.	1,557	1,327	933
" " " value £	1,898	1,695	1,259
Cocoa-nut oil .. .. .. cwt.	4,042	17,878	1,805
" " .. .. value £	5,735	26,058	3,012
Olive oil .. .. tuns	1,857	1,644	1,169
" .. .. .. value £	70,211	62,897	42,993
Palm oil .. .. cwt.	70,048	67,336	99,559
" .. .. .. value £	70,078	64,443	94,533
Petroleum oil .. .. .. gals.	5,388,918	4,823,942	4,936,462
" " .. .. value £	148,717	139,499	127,153
Various seed oils .. .. .. tons	949	1,032	981
" .. .. .. value £	24,420	24,994	24,031
Turpentine .. .. .. cwt.	866	5,659	35,405
" .. .. .. value £	1,055	7,495	49,293
EXPORTS			
British and Irish produce—			
Drugs and chemical preparations, unenumerated value £	75,571	73,380	77,211
Sundry chemicals .. .. .. "	283,337	284,072	352,462
Painters' colours and materials "	117,891	112,895	132,552
Alkali .. .. cwt.	494,355	458,181	543,276
" .. .. .. value £	142,607	130,517	134,431
Bleaching materials .. .. cwt.	130,443	104,111	132,211
" " value £	40,273	39,174	50,338
Seed oil .. .. tons	6,494	5,320	6,171
" .. .. value £	138,931	113,956	124,988
Pickles, vinegar, sauces, condiments and confectionery .. "	101,199	85,413	108,395
Soap .. .. cwt.	31,238	43,788	37,449
" .. .. value £	32,030	42,631	34,885
Foreign and Colonial merchandise—			
Chemicals, unenumerated .. "	13,763	35,100	27,946
Cinchona bark .. .. .. cwt.	8,692	9,921	11,125
" " .. .. value £	42,123	37,342	29,059
Cochineal .. .. cwt.	991	730	408
" .. .. .. value £	6,527	4,779	2,501
Cutch and gambier .. .. tons	767	1,045	814
" " .. .. value £	19,714	26,108	22,340
Gum Arabic .. .. .. cwt.	3,578	2,956	4,923
" " .. .. value £	15,172	10,393	23,401
Indigo .. .. cwt.	1,962	2,323	1,857
" .. .. value £	44,518	52,361	38,989
Lac, seed, shell, stick, and dye .. cwt.	6,213	4,713	8,153
" " " " value £	18,205	11,776	21,688
Cocoa-nut oil .. .. .. cwt.	14,182	11,928	10,163
" " .. .. value £	19,096	15,890	13,076
Olive oil .. .. tuns	147	336	298
" " .. .. value £	7,064	13,624	11,898
Palm oil .. .. cwt.	11,548	46,728	72,218
" " .. .. value £	10,809	44,355	68,788
Petroleum oil .. .. .. gals.	73,938	18,539	35,365
" " .. .. value £	3,591	964	1,509
Quicksilver .. .. .. lbs.	499,250	560,289	440,145
" .. .. value £	42,474	49,199	40,961
Cinnamon .. .. lbs.	132,951	132,800	79,996
" .. .. value £	4,671	4,653	3,035
Pepper .. .. lbs.	1,499,685	1,515,500	1,733,153
" .. .. .. value £	43,297	48,532	58,413

Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Commissions to Medical Men.

SIR,—In your last issue "A Britisher" brings a serious charge against some medical men and some chemists in the Isle of Wight. If the allegations contained in this letter are true, and can be substantiated, "disgraceful" is the cooing of a dove compared with the epithets that might be used. It is generally pretty safe to swear "at lairge," but one should not look too intently in one direction during the operation. While "A Britisher's" exordium includes the "Isle of Wight," the body of his letter is confined to "this enlightened town," wherever that may be. As there are only two *bonâ-fide* "firms of chemists" in the island, and I can assure "A Britisher" that the firm with which I am connected at Newport has no knowledge whatever of the practice he so strongly condemns, either his charge falls or it applies to one other town only. In that town there is only one firm of surgeons, and so the disguise of the writer easily falls off.

The story of the undertaker's commission has done duty these two decades or thereabouts. I should be interested to know if there is any recent revival. It is a mystery to me how "A Britisher" has discovered the exact division of the plunder between chemist and doctor, as when he says that the "firm of surgeons" take five-sevenths, and the "plausible" practitioner six-sevenths. Surely if a patient pays 3*s.* 6*d.* for a bottle of medicine, for which the chemist receives 6*d.*, the chemist must be acting as financial agent as well as dispenser, and the patient must know that the sum includes "attendance." I know of no such practice, and I can only account for it upon some such hypothesis, if it exists. The recommendation of any particular chemist is always suspicious. If pecuniary interest underlies it, it is a disgrace to the chemist and an infamy on the part of the doctor. Possibly we may be the subjects of misunderstanding on the part of the patient, some of whom will always ask the medical man where they should "take the prescription." I have had clients who could not disabuse themselves of the notion that they must go just occasionally to a particular pharmacy to keep right with the doctor, but they have not been of the class who could hold their own, amongst whom these "little games" are seldom tried. I am afraid that a growl in a trade journal will not accomplish much good. It is the public who need education on the subject, and the public, I apprehend, do not see your issue. How far THE CHEMIST AND DRUGGIST circulates among medical men I have no means of judging, but it does seem to me occasionally that if the faculty scans the somewhat elementary questions that are sometimes found in your correspondence, doctors may feel some sort of obligation to give their patients a hint in the choice of their dispenser. If this is done "for a consideration," "A Britisher" himself is no more determined foe to the practice than

Yours, &c.,

Ryde, July 10. HENRY H. POLLARD.

[We take it that "A Britisher's" cases were typical ones. Any misconception which may exist regarding the Isle of Wight is effectually disposed of by Mr. Pollard.]

New Use for Address Labels.

SIR,—We think it right to inform you of the following little plot, of which we have just been the destined—though not the actual—victims.

On Saturday last, just at our busiest time, a respectably dressed young man presented at our counter an order for several lines of goods. The order had upon it a gummed label bearing the name and address of a well-known customer. The handwriting being unknown, our counterman inquired if the customer was out of town, and the "young man" promptly replied, "Yes, he is; and the assistant sent me." He added that he was going on to a neighbouring firm and would call back for the goods.

We decided, however, to send the parcel *direct* to our customer, and soon had his intimation that he had never sent any such order. The label, he admitted, was apparently genuine, but he could only suppose it was one he had handed to a casual caller who had promised to forward a price-list of certain goods he had offered, or hoped soon to offer. He had, however, asked our friend for his printed label, and the polite request had been innocently complied with.

To sum up. Our customer was not out of town. His *soi-disant* representative did not return for the goods, and *we should like him to give us another call.* And we record the incident "*pour encourager les autres*"—not to part too readily with their printed labels!

We are, dear sir, yours faithfully,

F. NEWBERY & SONS.

L'Affaire Dunstan.

SIR,—You have already done so much good service in bringing before your readers "l'affaire Dunstan," and the behaviour of the Pharmaceutical Council in connection therewith, that I am sure you will grant me a small space in your journal in order to call attention to the way in which that body endeavours to stifle inquiry and shelve complaints. In the first place I will briefly recapitulate the communications which have passed between the Society and myself on the subject.

On May 15, in answer to inquiries made of the Secretary, I was informed by letter that the Wednesday morning lectures were discontinued "with the concurrence of the President," and the Professor "hopes shortly to be able to resume them."

On the following day, at the annual meeting, the President stated that "Mr. Storey's question with regard to the same subject was very easily answered, and if he or his pupil had written to the Professor he would have received the explanation which he would now make to him," and then followed the neuralgic anecdote.

In consequence of the statements which appeared in your issue of June 2 (*vide* pages 726 and 733), I wrote a letter to the Council, published in your issue of June 9, in which I asked to be favoured with replies to the following questions:—(1) "On whose authority the President stated that the Professor's state of health necessitated his release from his Wednesday's duties?"; (2) "If such release was the outcome of an arrangement between the Council and the Professor, or the President and the Professor?"; (3) "Whether the President or any other members of the Council were aware at the time of the annual meeting that the Professor was in the habit of so employing the time granted to him for the purpose of recruiting his health?"; and (4) "Should it be proved that the Professor's health does now happily admit of his lecturing more than twice a week, what steps are proposed to be taken in order to ensure his Wednesday's lectures being given to the students of the Society's school?"

Simple as the questions appear to be, and ready of reply as the President had previously proved himself, the Council nevertheless found it necessary to wrap itself up in its usual mantle of secresy—"it went into committee." There it is reported to have discussed "l'affaire" for some hour and a half, and even then they felt compelled to refer it to a committee for "further consideration." One would have at any rate expected that when the report of this committee reached the Council at its July meeting, the President and Council would have been only too glad to avail themselves of the opportunity of either publicly accounting, if possible, for the remarkable discrepancies between the versions of May 15

the Secretary's), May 16 (the President's), and June 2 (your correspondent's) of the reasons which accounted for the Professor's absence from his post, or, in the event of their being unable to contradict "No. 21's" statements, of apologising—the President for having made, and the other Councillors for having acquiesced by their silence in the excuse palmed off upon the members of the Society at the annual meeting. Instead, however, of this, we find that they again "went into committee," and in the end, as the result of these three committee meetings, the resolution was passed which you published in your report of the last Council meeting.

It is only natural to suppose that as the Council entirely ignored the first and third questions contained in my letter, it did so because it was unable to answer them without inculpating some one, and the members of the Society can judge for themselves what amount of reliance they can in future place upon the answers given to their inquiries respecting matters connected with the School of Pharmacy, for we have the President's own word that "had I or my pupil written to the Professor in the first instance, we should have received the same explanation" as was vouchsafed to the members at the annual meeting.

Whether the idea of referring the consideration of the matter to the committee was or was not a ruse for the purpose of enabling Professor Dunstan to complete his course of lectures at Oxford before the Council gave vent to any public utterance on the subject, thus allowing our Councillors to remark with so much complacency that "the temporary arrangement made by the President is now concluded," it is impossible to say, but it would be interesting to know whether we are to expect these "temporary arrangements" to occur annually, or whether the Professor anticipates before next April being able to solve the problem of being in two places at once. Unless the latter somewhat improbable event occurs, I fail to see how he will be able to accomplish the task of attending his classes at Oxford and of properly fulfilling his duties as our Professor of Chemistry. It is sad to find that the Council has for the last three years winked, as appears to have been the case from the wording of their own resolution, at alterations in the mode and times of delivery of the chemistry lectures, and any proposed deviations from the usual course should at least have been announced in the Society's calendar, &c.; but I think it is only fair to state, what I believe to be the fact, that some of the Councillors agreed to the original appointment of Mr. Dunstan to the professorship in the belief that when his Oxford appointment lapsed he would not offer himself for re-election, and they were surprised to hear he was again lecturing there.

The Professor is to be pitied. Appointed to the chair of chemistry with munificent remuneration for his services, the Council express their value of these services by informing the students that they do not consider the omission of some eight or nine of the Professor's lectures gives them any just cause for complaint or dissatisfaction! And, "unkindest cut of all," instead of forwarding their resolution to the students for their own quiet perusal, these kind friends tell the Professor to officially announce their opinion to his pupils!

In conclusion I beg to direct the attention of the President and Council to the fact that I have had no answer to two out of the four questions which I addressed to them.

42 Castle Street, East, Oxford Street, W. Yours, &c., EDWARD H. STOREY.

Military Compounders of Medicine.

SIR,—Being flooded with inquiries as to rates of pay, uniform, &c., of the M. S. Corps, will you kindly insert the following:—

Physical fitness and good character essential. "Minor" not necessary, but it is a recommendation. Enlistment in usual manner, to serve three years in army and nine in reserve. To do duty in the military hospitals generally, and not with a particular regiment.

Pay varying from 1*s.* 6*d* (3rd class private) per day to 5*s.* 6*d.* on promotion to warrant officer.

Hours of duty vary greatly, but are not at all unreasonable.

Dispenserships obtainable—after enlistment—by passing examination similar to that of the Apothecaries' Hall.

Age, 19 to 28; height, 5 ft. 2 in. to 5 ft. 5 in.

Reasonable "leave" is granted; a month can be obtained during the winter season.

Uniform has to be constantly worn, but permission to wear plain clothes is sometimes given, when particularly desired. The uniform (dark blue with Geneva cross on the right arm) can generally be seen in any garrison town.

Recruiting is only temporarily suspended.

Before being examined for dispenser one must pass through a course of ambulance and other drill, professional lectures, outlines of anatomy and physiology, bandaging, use of surgical instruments and appliances, application of dressings, &c, and nursing generally.

A good book to obtain, showing the duties of the corps, is the "Manual of the M. S. Corps," 2*s.*, Longmans & Co.

Yours truly,
Shooter's Hill, S.E., July 9. T. G. ROSE.

Milk of Sulphur.

SIR,—Kindly allow me to endorse good friend "Heder's" action in supplying pure sulph. præcip. for the above, and to assure him that he may continue to do so without the slightest hesitation.

I supplied some of the pure kind nearly ten years ago, under Food and Drugs Act, and labelled "milk of sulphur," as asked for, and it was passed by one of the best and most experienced analysts in London.

There is not much fear of any chemist who supplies this having to appear in court to answer a charge of supplying a drug not of the nature or substance or quality demanded, and it is certainly not to the customer's prejudice to be supplied with a pure article instead of an impure one.

If our clients want the impure preparation, it is their duty to ask for it, and the chemist would label accordingly.

But why go back to the Ph. Lond. 1724 for the impure kind, when even a hundred years ago it was discarded, for in 1788 we find in P.L. it is ordered to be made from sulphurated kali in solution, and precipitated by dilute vitriolic acid; and this in turn gave way in 1824 to the process now in use in B.P.?

I have made inquiries of my wholesale friends, and they state that they supply very little indeed of the impure kind to chemists, and it is quite exceptional to sell any, and then only in a few odd places. The various kinds of sulph. præcip. were found so unsatisfactory that Dr. Neligan remarks in 1853 it had nearly gone out of use; and he gives the synonyms lac sulphuris—milk of sulphur.

In Dr. Garrod's "Materia Medica," 1868, and Dr. Lauder Brunton's "Text-book of Pharmacology," 1885, the same synonyms are to be found, and also remarks about the impurity of the sulphur precipitated by sulphuric acid.

There is ample proof to show that the pure variety was a well-known article of commerce at the time of the passing of the Food and Drugs Act in 1875, and was most distinctly known as milk of sulphur.

Let us stick to the B.P., and try to get lac sulphuris and milk of sulphur inserted as synonyms, and do away with the impure variety, which I look upon rather as a disgrace to modern pharmacy.

As a diligent reader of THE CHEMIST AND DRUGGIST, permit me to express my best thanks to "Heder" for his contributions to your paper, and to hope that he may long continue to be the life and soul of the correspondence column.

Yours faithfully,
Sandown, I.W., July 10. GEORGE BROWN.

The Seller of Poisons.

SIR,—Your article *re* "The Seller of Poisons," in THE CHEMIST AND DRUGGIST of June 30, pointed out a fact in law which either the Pharmaceutical Council are ignorant of, or are unwilling to make use of the legal machinery that they already possess to verify, and thereby benefit the trade.

Two other correspondents in last week's issue, viz. "Pharmakon" and "A. D. Major," are in touch with my own opinions, and doubtless of many others of the trade. "Who will be our leaders?" asks the latter; and really I think if some good wholesale houses would combine and start a committee to form a "union," having for its objects the vital interests of the trade, they would be supported in more ways than one.

I have previously reminded your readers of the great success achieved by such a movement formerly, when our

cause was championed by a well-known Midland wholesale firm. I wish we could again obtain the help of such men to champion our cause.

Yours respectfully,
HIRUDO. (88/63.)

SIR,—*Re* "Pharmacy Act" and "Qualified Assistant," I am quite of your opinion. So long ago as 1882 I advocated much the same thing. Chemists cannot complain of the Stores with a very good grace when they allow unqualified men to sell and compound poisons, and we should as a body make up our minds to tackle this question. It ought to have been seen to long since. Yours, &c.,
PHAR. CHEM. (89/44.)

Conservatism in Pharmacy.

SIR,—I should fancy "W. H. H." must be either a very young man or else has not had much experience to be so surprised at such a common practice as the one referred to—at any rate, it is a very common practice in this county—and if the public prefer to have it, I presume it is our business to supply it in that form.

Pil. cochia is the only pill sent out in that form, as far as I know, and it is usual to pipe the mass and then mark the divisions by pressing it on the cutting part of the pill-machine with the back of the roller, of which six divisions are usually sold for 1*d*.

The conservatism lies rather with the public than the chemists, and it is just possible that some of the aforesaid chemists may be as vigorous, modern, and go-ahead as even "W. H. H." himself. Yours faithfully,
Teignmouth. JNO. E. RYDER.

Felon Drinks.

(1.) Take aniseeds, caraway seeds, and ginger, of each 2 oz. in powder, and mix them together for one drink.

(2.) Take aniseeds and cumin seeds, of each 2 oz. in powder; black pepper and ginger, of each 1 oz. in powder; mix for one drink.

Clater says:—"Take either one of these, put into a pitcher with 2 oz. of fresh butter and two tablespoonfuls of treacle or coarse sugar, pour on a quart of boiling ale, cover until new-milk warm, and give it the beast to drink." These drinks are recommended for either chine or joint felon.
CASCARA. (86/30.)

Edina (84/14) communicates the two following formulæ for "old and well-tried remedies":—

Cordial Felon Drink.

Pulv. anisi	℥ij.
„ zingib.	℥ij.
„ cymin.	℥ij.
Sulphur et bol. armeniæ, of each	℥ij.
Pulv. gentian.	℥j.
„ curcum.	℥j.

To be given in 3 pints of warm ale.

Cordial Opening Felon Drink.

Mag. sulph.	℥xij.
Pot. supertart.	℥j.
Pulv. zingib.	℥j.
„ cymin.	℥j.
„ curcum.	℥j.
Ol. carui	♏ 30

To be given in 3 pints of warm ale.

	oz.
Epsom salts	9
Ginger	1½
Caraway	¾
Coriander	¾
Fœnugreek	¾
Turmeric	¼
Aloes	¼
Carbonate of ammonia	¼

Mix. One dose.

TULIP. (84/64.)

This is a formula for felon drink which formerly had a great reputation in the North of England:—

Pulv. zingiberi	℥ij.
„ sulphur. flores	℥ij.
„ equini	℥ij.
„ sinapis	℥j.
„ sem. anisi	℥j.
„ „ carui	℥j.
Magnes. sulph.	℥viij.

M. Give in a quart of ale with ½ lb. treacle.

C. G. (86/69.)

SIR,—Your inquirer (71/39) is welcome to the following for cow drinks generally. I have used them now for many years, and find them most reliable:—

Aniseed, pulv. carui, pulv. gentian	aa. 2 oz.
Mustard, pulv. cyminæ	aa. 1 „
Turmeric	½ „

M. For one dose.

Cordial.—As above. *Comfortable.*—As above, *plus* nitr ʒij. *Cleansing.*—As above, *plus* spermaceti ℥j. *Aperien*—As above, ℥ss. aloes and ℥vj. salts. *Felon.*—As above, ℥s ammon. carb. *Cough.*—As above, ℥ss. pulv. scillæ. *Yellow*—As above, ℥ss. potas. carb.

Yours truly,
Leeds, July 9. E. SHARPE.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Dispensers who have compounded any of the following prescriptions, or similar ones, are requested to communicate their results to the Editor.

Mixture and Pills.

SIR,—How should the following be dispensed?—

Ferri et quininæ cit.	ʒiss.
Sp. ammon. arom.	℥ss.
Aq. ad	℥viij.

M. Ft. mist.

A tablespoonful three times a day.

Ol. pulegii	♏viij.
„ rutæ	♏xij.
Ext. hyoscyami	gr. viij.
Pil. aloes et myrrh.	gr. xxiv.

M. Ft. pil. viij.

One every other night.

Yours truly,
HIERA PICRA. (81/36.)

[*Mixture.*—Dissolve the citrate in 6 oz. of water, add 3 drachms of mucilage of acacia, then the aromatic spirit of ammonia, and make up to the 8 oz. with water. Without the mucilage the precipitated quinine cannot be apportioned into doses.

The Pills can be formed into a bolus by the aid of powdered animal soap, but as pills they are undispensable. The prescriber should be consulted and informed of the fact.]

85/45. *D. S. Henderson.*—In the reply to *Bon Accord* (page 853), it is stated that there is "liberation of iron," the latter word is a misprint for "iodine," as the context shows.

An Interpretation Wanted.

SIR,—Will you or any of your enlightened correspondents kindly inform me how the following should be made?—

Pulv. iodoformi	ʒj.
Vaselini	q.s.

Ft. ung.

To approach the prescriber is out of the question, he being fifty miles away. The directions are as follows:—"A small quantity of the ointment to be rubbed into the eye three

imes a day after the drops." The patient is a child about 2 years old. The drops are :—

Liq. atrop. sulph. B.P.	ʒij.
Cocain. hydrochlor.	gr. vj.
Aq. destil. ad	℥ss.

Two or three drops to be dropped into each eye three times a day.

I am, sir, yours, &c.,
GRATEFUL. (90/11.)

Salicylate Mixture.

SIR,—I had the following prescription to dispense the other day. The person states that when obtained in Manchester it was almost as dark brown as brown Windsor soap; mine was almost as colourless as water. Who is right?—

Sodii salicylatis	ʒiiss.
Potassii bicarb.	ʒiiss.
Tinct. aconiti	ʒss.
Aquæ ad	℥viij.

M.

BOS. (84/26.)

[A dispensing solution of potassium bicarbonate has apparently been used in Manchester. This often contains potassium carbonate, owing to change which always takes place in aqueous solution of the bicarbonate. Potassium carbonate is the cause of the brown coloration of the solution of sodium salicylate, and for that reason we have previously recommended that the bicarbonate should be freshly dissolved in such cases.]

LEGAL QUERIES.

87/47. *W. H. D.* asks:—"Is there a stamp to be put upon patent medicines sold in Ireland?" [The Patent Medicine Stamp Act does not extend to Ireland; but the querist resides in Great Britain, and apparently means:—Should any article which he sells here as a patent medicine be stamped if it is sold in Ireland? That depends on the nature of the order. If an Irish chemist sends for a dozen of our querist's article, and pays for them, they must be stamped; but if "W. H. D." sends—properly speaking, consigns to—an Irish chemist, his agent, a dozen of the article which will remain "W. H. D.'s" property until they are sold, they need not be stamped.]

77/22. *E. de Franciose.*—There is no restriction regarding the practice of pharmacy in Jersey. The Pharmacy Act does not extend to the Channel Islands, although it is recognised in Guernsey by the Royal Court.

88/62. *Cardiffian.*—The modified examination is only open to those who before December 31, 1869, produced to the Registrar under the Pharmacy Act, certificates to the effect that they had been engaged for three years in the dispensing of prescriptions as an assistant to a pharmaceutical chemist or chemist and druggist. The Registrar has no longer the power to accept such certificates. Apprentices who could comply with requirement were, no doubt, allowed to enter for the examination.

84/37. *H.*—Camphorated chloroform would be considered a poison, but it is doubtful if a cough mixture containing a minute dose of morphine can be placed in the same category. The poisons schedule specifically mentions certain articles, but it does not cover all preparations containing such articles

85/21. *Alf.*—(1) The title "Hermit's Oil" may, as far we know, be registered as a trade-mark. This you may ascertain by payment of a fee of 1*s.* to the comptroller. If it is not registered we do not see whose rights you would infringe by using the title. Of course you may not imitate the style of putting-up adopted by the proprietors of any well-known preparation. (2) We do not have a formula.

87/66. *Ointment* (Armagh).—We were quite correct when we said that red and white precipitate ointments are not in the schedule of poisons, nor is mercurial ointment, so that anyone may sell these, as they can also sell patent medicines containing poisons. This latter exemption does, not, however, apply to Ireland. Belladonna plaster is a preparation of belladonna, and is included in the schedule. The fact that it is spread on a piece of leather or cloth does not alter the case, and all belladonna plasters should properly be labelled "poison," &c.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ which have already been published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Cod-liver Oil Emulsion.—Three formulæ are given in our last volume, pp. 205, 281, and 331. (84/73. *Dental.*)

Ginger-beer Powder.—See our issue of March 3, p. 281. (86/51. *Zingib.*)

Carbolised Smelling Salts.—See p. 708, June 2. (88/20. *A. E. Seller.*)

83/72. *F. S.* (Sheffield).—The object of our trade report is primarily to give information concerning such pharmaceutical articles as are dealt with in the open market, or for which a definite and regular quotation exists. Extracts do not come under this denomination, and we should exceed the scope of our report were we to give quotations for them. We would advise you to apply to the manufacturers, whose names you will find in our advertisement column.

82/58. *Tenax.*—A teaspoonful of acetic acid to every 7 lbs. of sugar is used for hardening Toffee.

82/40. *Mag. Sulph.*—Your joke is too ancient. Later reprints of the Pharmacopœia state that the 30 oz. of fluid are to be placed in a *quart* bottle, and Dr. Attfield has publicly explained that the word was a misprint.

82/17. *Economist.*—White of egg may be utilised by spreading it on plates, drying carefully in an oven, and preserving the scaled albumen in well-corked bottles. This can be dissolved in water, as required, for coating pills, &c. We do not have the formula of the marking ink which you name. Consult the index in last week's issue for others.

82/22. *C. E. L.*—**Metallic Hair-brushes** can be cleaned with Hudson's soap powder, or ordinary soda ash in the usual manner.

82/14. *J. Carr.*—If you turn to our issue of November 5, 1887, you will find the prescription fully explained.

82/24. *G. A. M.*—The black spots on the blankets resulting from the sprinkling of perchloride of mercury on them are evidently due to the formation of sulphide of mercury. Sulphur is used in bleaching wool, and as the blankets have, apparently, never been washed, it has remained in them to react with the mercury. The first thing to do with the blankets is to wash them, and if this is done well the stains will disappear in the rubbing. Otherwise use carefully dilute nitric acid (1 in 4) warm.

Varnish for Indiarubber Enemas.—Boil good tallow soap with soft water until dissolved, filter while hot through cloths, heat again, add half its volume of boiling water, and a strong solution of alum so long as an aluminium salt is precipitated. Let the stearate of aluminium settle from off the

water, and wash the precipitate thoroughly, dry, and heat on water-bath until transparent. Stir the preparation into turpentine heated nearly to boiling, until the solution is about as thick as varnish; it can afterwards be thinned if necessary. Or the following:—One part of common black guttapercha (perished tubing or enemas will do well) to be dissolved in 7 parts of carbon-bisulphide, and applied by means of a camel's-hair brush; this preparation retains its elasticity, no matter to what temperature of the atmosphere it be exposed.—*Cascara.* (86/30.)

80/6. *W. P. Parry.*—We do not have details of the manufacture of gelatine tissue.

Waterproof Wall-papers.—(*Anon.*)—There is no way of making papers waterproof after they are printed. The manufacture of the paper is a secret process, and is in the hands of a few workmen. It is supposed to be done with wax, paraffin, and oil. The paper is "prepared" first, and the colours are also of a special kind, oil being the basis.

85/66. *Pill Box.*—Please read the paragraph again. The Minor certificate is accepted by the Scottish universities as proof of training in pharmacy, and this, as we stated, is as far as acceptance of the Minor certificate goes, in the medical curriculum. The lectures given in pharmacy, chemistry, and materia medica at the South London School of Pharmacy, the Westminster College of Pharmacy, and the Central School of Pharmacy (Mr. Woodlands) are accepted by medical qualifying bodies.

Black Gip.—Mr. James Burt recommends nitrate of silver. The same correspondent also recommends for **Leech Aquarium**:—*Anacharis alsinastrum*—it does not require anchoring; fish—small carp, preferably minnows; molluscs—Linnea stagnalis, Planorbis corneus.

87/55. *J. F. Royse.*—Try nut oil for the file makers. It is a remarkably bland oil, and is not likely to become sticky. To prevent cocoa-nut oil soaking through willow boxes you should dip the boxes in melted hard paraffin. This renders them perfectly impervious.

87/48. *Ajax.*—Any intelligent local bookseller will give you the information which you desire.

Colouring for Canaries.—*Tulip* (84/64) says:—"Canary fanciers in Yorkshire use very finely ground 'camwood,' with a very small percentage of cayenne."

85/35. *Fog.*—The addition of spirit to your **Cough Mixture** in sufficient quantity to prevent fermentation would tend to throw the sugar out of solution. You should omit the syrup of poppies and substitute syrup of squill for the oxymel, as in the following formula, for example:—

Tinct. camph. co.	℥iij.
Syrupi scillæ	℥iss.
Glycerini	ʒvj.
Vin. ipecacuanhæ	ʒiss.
Aquæ camphoræ ad	℥vj.

M.

84/23. *J. W. & Co.*—**Dubbing.**—Black resin, 2 lbs.; tallow, 1 lb.; crude cod oil, 1 gallon. Boil to a proper consistence. It is sometimes made by boiling cuttings of sheepskin in crude cod oil.

85/3. *Careful Man.*—(1) The fact that the exchange column exists, and that so many people repeatedly use it is the best proof of its value. (2) The plate powder for which you send the formula would be better if you omitted the boiling water, using only finely-powdered ammonium carbonate.

85/11. *A. G.* asks:—"What proportion of carmine would be required to colour a powder containing white sugar and decorticated liquorice?"

[We quote the question as a type of many "difficulties" which inquirers can solve for themselves in two minutes. What is there to hinder "A. G." rubbing up three or four grains of carmine with the sugar, and then adding the liquorice?]

85/4. *X. Y. Z.*—To **Renew the Colour of Sponges** which have lost it by exposure in the window, steep them for an hour in cold water, then transfer to a bath consisting of 20 grains permanganate of potash, ½ oz. hydrochloric acid, and 2 gallons of water; a minute's immersion in this is generally sufficient. Then wash well with cold water, and, finally, dip in a bath made from 2 oz. carbonate of potash, ½ oz. of roll annatto, and 2 gallons of water. Press and dry.

*** *Owing to pressure on our space this week we hold over a large number of letters and replies to queries, including analytical reports on samples.*

Personalities.

Mr. F. D. Jeacock has commenced business at 13 Pier Terrace, Lowestoft.

Mr. Martin, chemist, Fore Street, Redruth, has disposed of his business to Mr. Bray.

Mr. John Martin, formerly of Redruth, has purchased a business at 87 Fishergate, Preston, Lancashire.

Mr. W. R. Hopkins, pharmaceutical chemist, has just commenced business at Vere Street, Codoxton, Cardiff.

Mr. R. J. Seabury, of Seabury & Johnson, New York, arrived in Liverpool by the *Umbria* last week, and is now in London on a business visit.

Mr. A. H. Mason, F.C.S., of the firm of Evans, Sons & Mason (Limited), Montreal, was entertained at dinner by a large number of his friends on the occasion of his leaving Canada to reside in England. The dinner was given in the Club Rooms of the Windsor Hotel. Mr. J. H. Redfern presided, and among the company were:—Dr. Leprohon, Dr. Lapthorn Smith, Dr. Baker Edwards, Mr. W. A. Dyer, Mr. S. Lachance, Mr. J. S. Shearer, Mr. B. Reed, Mr. Geo. Kemp, Mr. J. Y. Gilmour, Mr. C. G. Geddes, Mr. A. B. Evans, Mr. T. V. R. Brown, Mr. C. P. Sclater, Mr. William Manson, Mr. Andrew Robertson, Mr. C. P. Hebert, Mr. C. Lyman, Dr. Brennan, Dr. Lamarche, Dr. Butler, Q.C., Mr. A. J. Fenwick, Mr. C. A. Nelson, and Dr. T. D. Reed, secretary. After dinner and the loyal toasts the chairman proposed the health of the guest of the evening, remarking in the course of his speech that he regretted Mr. Mason's early departure. It was only a few short years since he came there, and during that time he had somehow managed to wind himself about their affections. He had been elected a member of the St. George's Society, and had become respectively second and first vice-president, and he would have become president. Several other gentlemen in the company added words of appreciation, including Mr. Manson for the Pharmaceutical Association, Mr. F. G. Lyman for the wholesale drug trade, Mr. Nelson, Mr. Dyer, and Mr. Lachance for the retail drug trade, and Dr. Lapthorn Smith for the medical profession. The toast was received with full honours, and Mr. Mason, in the course of his reply, said the knowledge he had obtained here as to immigration he hoped to turn to good account when he got home. He referred to the high standard at which pharmacy was carried on in that country, and spoke in eloquent terms of the climatic and natural advantages of the country, and in conclusion he thanked them for that magnificent testimony of their goodwill towards him. The Pharmaceutical Association of the province of Quebec and the Board of the Montreal College of Pharmacy, of the latter of which Mr. Mason has acted as president, have unanimously passed resolutions thanking Mr. Mason for his services, and expressing regret that he is leaving the country.

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Antipyrin (5 grs.)	In each drachm
Bismuth and Pepsine	,,
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(4 grs.) (4 grs.) (1 gr.)	,,
*Bismuth, Pepsine, and Steel	,,
(4 grs.) (4 grs.) (4 grs.)	,,
Bismuth, Pepsine, and Strychnia	,,
(4 grs.) (4 grs.) ($\frac{1}{60}$ gr.)	,,
*Bismuth, Iron, and Quinine...	,,
(4 grs.) (4 grs.) (1 gr.) ...	,,
*Bismuth and Iron	In each drachm
(4 grs.) (4 grs.)	,,
*Bismuth, Iron, and Strychnia	,,
(4 grs.) (4 grs.) ($\frac{1}{60}$ gr.)	,,
*Iron and Arsenic	,,
(4 grs.) 3 mins. (Fowler's Solution)	,,
*Iron and Pepsine	,,
(4 grs.) (4 grs.)	,,
*Iron, Quinine, and Strychnia	,,
*4 grs.) (1 gr.) ($\frac{1}{60}$ gr.)	,,
Iron, Quinine, and Pepsine...	,,
(4 grs.) (1 gr.) (4 grs.) ...	,,

* *The Ammonio-Citrate of Iron is used in these preparations.*

They are supplied in any quantity, from 2 oz. upwards.

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They help to remove the Pricking and Titillation of the throat, strengthen the vocal cords, and are very useful in diseases of the Œsophagus and the Stomach, Sea-sickness, Gastritis, Gastralgia, Vomiting, &c.

DOSE.—Take 6 to 8 pastils per diem, according to age, and at least one hour before meals.

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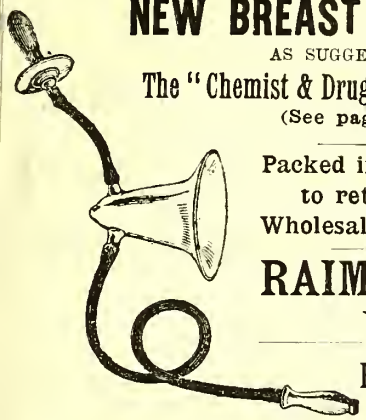

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It contains in each fluid drachm—

Hypophosphite of Lime		1 gr.
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,, ,,	Potassa	1 gr.
,, ,,	Iron (Protoxide)	1 gr.
,, ,,	Manganese	$\frac{1}{4}$ gr.
,, ,,	Quinine	$\frac{1}{4}$ gr.
,, ,,	Strychnine	$\frac{1}{100}$ gr.

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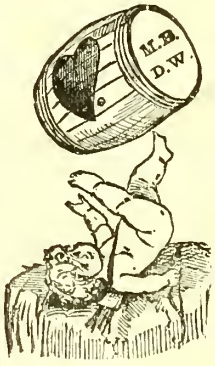

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The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List on application.

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Calcii Sulphid. $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1 gr. 1/8

Cascara Sagrada (Ext.), 2 gr. 2/-

Ergotin. Comp. ℞ Ergotin, 1 gr.; Ferri Sulph. Exsic., 1 gr.; Ext. Hellebor., 1 gr.; Ol. Sabinæ $\frac{1}{2}$ m.; Ext. Aloes Soc., 1 gr.... ... ... 3/-

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Phosphorus, $\frac{1}{80}$ **Ext. Nuc. Vom.**, $\frac{1}{4}$ gr. 2/-

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QUININE FACTORY AUERBACH

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Certified by Professor Fresenius, of Wiesbaden, as equal to the best preparations of other marks.

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(VORMALS ROSSLER),

FRANKFORT-ON-MAINE.

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IODIDE OF POTASSIUM,
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Full list and prices, see Drug List.

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250 YEARS' WORLD-WIDE REPUTATION

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DOSE—HALF DRACHM.—Equivalent to Liq. Bismuthi B.P., ʒj; Æther. Chlor., 15 ♏.; Tinct. Nucis. Vom., 8 ♏.; Morph. Mur., gr. $\frac{1}{24}$; Acid. Hydrocyanic. Dil., 2 ♏. (*Coloured as Tinc. Card. Co.*)

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MANUFACTURED OF LOOFAH, PREPARED AND BLEACHED BY A NEW SPECIAL PROCESS.

ELSTE'S LOOFAH SOCKS absorb all the moisture from rain, snow, or perspiration, keeping the feet warm and dry in winter and cool and comfortable in summer. They can be cleaned with soap and water, thus rendering them superior to any at present in the market.

ELSTE'S LOOFAH BATH GLOVES combine the utility of the rough Loofah sponge with the softness of Flesh Gloves, and are acknowledged to be the *non plus ultra* of perfection. Order a sample dozen and judge for yourself.

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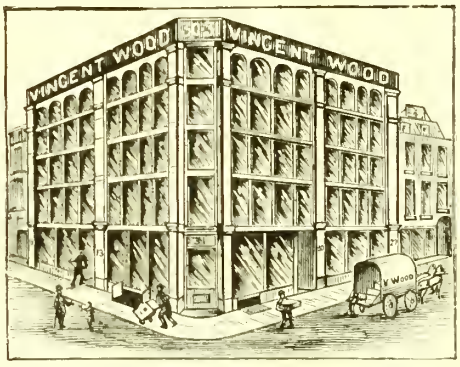

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Consisting of Chest and Lung Protectors, Ladies' and Gentlemen's Belts, Knee Caps, Throat Compresses, and Sleeping Caps for Neuralgia.

The Therapeutic properties of the Medicated Pine Wool Felt are undeniable, as Dr. BERKLEY, of the Royal College of Physicians, London, in his report states:—"Having tested the Medicated Pine Wool Felt, the invention of Mr. Vincent Wood, of Paternoster Square, London, E.C., I find it contains the drugs as mentioned by him, and I can recommend it with confidence." For full particulars and Medical Press reports see four-page Circular in the Special Issue of THE CHEMIST AND DRUGGIST, January 28, 1888.

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Some of our Customers have been troubled by the Inland Revenue requiring FOSSILINE to be stamped; we have now received the following letter:—

INLAND REVENUE, SOMERSET HOUSE, LONDON, W.C.

GENTLEMEN, *7th June*, 1888.

In reply to your letter dated 9th ult., I am directed by the Board of Inland Revenue to acquaint you that the sample of Fossiline forwarded to this office is found to be **a pure Drug.** It is, therefore exempt from Medicine Stamp Duty.

I am, your obedient Servant,

(SIGNED) E. BRIGHT.

EVANS, SONS & CO.,

2nd July, 1888. 56 *Hanover Street, Liverpool.*

N.B.—"Fossiline" is a pure Hydrocarbon Jelly, answering all the tests of the B. Ph. for Paraffinum Molle.

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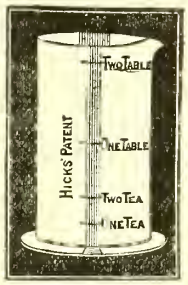

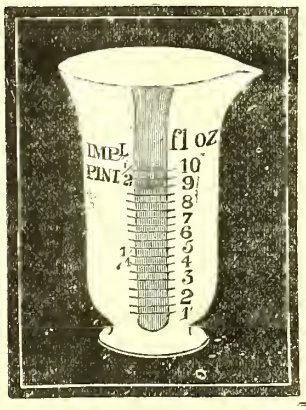

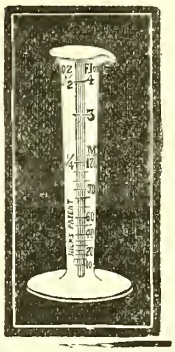

I. I. EXHIBITION, LONDON, 1885.

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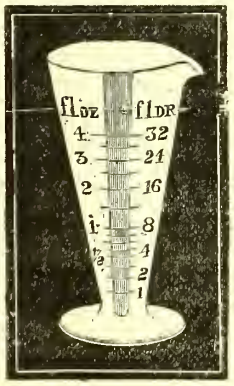

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The advantage of these Measures over those of Plain Glass consists in their being made of Pure White Enamel Tubing, with the divisions and figures fired on in indelible black. They can therefore be read with the greatest ease in any light.

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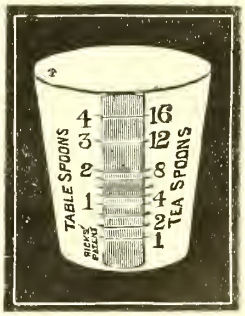

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GLYCERINE & SALICYLIC ACID.
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This entirely new and excellent health-giving preparation SOFTENS THE WATER, gives it a most *delicious odour*, and

BEAUTIFIES THE COMPLEXION

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As used and recommended by Madame Marie Roze, the Prima Donna.

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CAUTION.—SEE "WOODS, PLYMOUTH," ON EACH POT.

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Retail, 1/, 1/9, & 3/6; Wholesale, 7/, 12/, & 22/6 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

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SEE INDEX, PAGES 25—27.

"KAMPHORKALK"

A fresh Disinfecting Powder. It is a combination of soluble Chlorides and Camphor.

THE ADVANTAGES CLAIMED FOR IT ARE—

It is free from Poison. It is free from Smell (except a slight odour of Camphor). It is Soluble in Water It is White in Colour. It is not injurious to any fabrics. It is Effectual and Cheap.

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PERFECTLY HARMLESS.

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FOR
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Guaranteed to contain no lead, or any other noxious ingredient.

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PARFUMERIES DE SEILLANS

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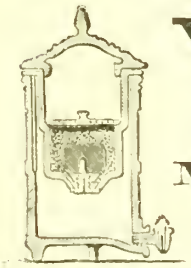

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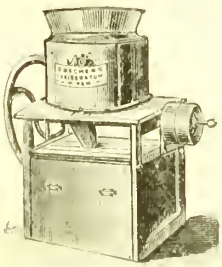
THE GREAT DIFFICULTY SOLVED!

To Manufacturing Chemists, &c.



How to Grind Crystals, Starch, &c.
How to Reduce Lumpy Powders.
How to Mix Many Ingredients in various proportions and produce a Perfect Blend with great rapidity!! [1]
} At one Operation!

BRACHER'S PATENT
Trade "DESIDERATUM" *Mark.*
Mixer and Drug Mill Combined

BRACHER & CO., West Hill, WINCANTON.

SHOW ROOMS: — LONDON — 100 Houndsditch: MANCHESTER — 24 Corporation Street; WOLVERHAMPTON — 2 Cleveland Street.
All communications to WINCANTON.

"CYMRY AM BYTH."

"ABSOLUTELY PURE."

REGISTERED.

ELLIS'S RUTHIN WATERS.

ASK FOR ELLIS'S.

CAUTION.—Corks branded "R. ELLIS & SON, RUTHIN." Every Label is Registered, and bears Name and Trade Mark (Goat on Shield).

SOLE ADDRESS—R. ELLIS & SON, RUTHIN, NORTH WALES.

London Agents: W. BEST & SONS, Henrietta Street, Cavendish Square

Registered

Trade Mark.

BREFFIT'S

(LIMITED)

AIRE AND CALDER BOTTLE CO.

OFFICES AND SHOW ROOMS—

83 UPPER THAMES ST., LONDON.

Registered

Trade Mark.

PRICES PER GROSS NET, FREE TO RAILWAY OR STEAMER, LONDON.

GLASS BOTTLES, EVERY CLASS AND DESCRIPTION, LATEST DESIGNS.

GROUND GLASS STOPPERED BOTTLES IN GREAT VARIETY.

BOTTLES.

CANNON ESSENCE SQUARES, NEW SERIES, White Flint Glass.

	6 drachm	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.
Plain	7/	7/6	8/	9/	10/6	12/
Stoppered	16/	16/6	17/6	18/	21/	22/
Fitted White Metal Sprinklers	14/6	16/	17/6	18/	19/6	21/

All Perfumery Bottlers should send for samples of these new and attractive Bottles.

MEXICAN FLATS.

	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.
White Flint Glass	6/6	7/	8/	9/	10/6	12/	14/
White Opal Glass	7/6	8/	9/6	11/	12/6	14/	16/
Blue Opal Glass	7/6	8/	9/6	11/	12/6	14/	16/

PANEL FLATS.

	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.
White Flint Glass	7/6	10/	10/6	12/6	13/6
White Opal Glass	9/	11/	12/6	14/	16/
Blue Opal Glass	9/	11/	12/6	14/	16/

NOVEL AND ATTRACTIVE WINDOW DRESSING SERIES.

POMADES OR ROUNDS, with Screw Metal Caps lacquered in brilliant colours, including divisioned card boxes of 1 dozen each.

	¼ oz.	½ oz.	¾ oz.	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.
WHITE FLINT GLASS—								
Plain Coloured Caps	11/6	12/	13/	14/6	15/6	16/	18/	19/
Coloured Caps with lines	12/6	13/	14/	15/6	16/6	17/	19/	20/
BLUE OR WHITE OPAL GLASS—								
Plain Coloured Caps	12/6	13/	14/	15/6	17/	18/	20/	21/
Coloured Caps with lines	13/6	14/	15/	16/6	18/	19/	21/	23/

Full Price-list of Nickel Screw-capped Pomades, Pill-tubes, &c., sent post free on application.

MEDICATED TOILET PAPER

"SANITAS"

UNDER LICENCE OF THE SANITAS CO., LD.

Retails at 1/-
Per Packet of 500 sheets, 5 by 7¼, in neat case;
Or per Roll, 5 inches wide, in neat canister.

On contact with water this paper emits a pleasant odour of "SANITAS," which DISINFECTS and DEODORIZES everything.

THE TRADE SUPPLIED BY
BARCLAY & SONS, Lim., W. EDWARDS & SON, F. NEWBERY & SONS, and S. MAW, SON & THOMPSON, London.

Sole Proprietors, THE HYGIENIC PAPER CO., 2 Queenhithe, Upper Thames St., London.

AUSTIN & CO.

PATENTEES & MANUFACTURERS OF ROUND CARDBOARD AND OTHER SHAPED BOXES
BRITISH AND FOREIGN,
For POSTAL and general purposes; also PATENT BARREL PACKAGES with Metal ends for dry goods.
Inventors of the "NOVEL" METAL PERFUME SPRINKLERS.

Office & Warehouse—8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.
Steam Works, 2 Printer's Buildings, Broad Yard, Turnmill St., London, and Ring Factory, Clonakilty, County Cork.

GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.

JOHN OAKEY & SONS,

MANUFACTURERS OF
Glass Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels, Pumice, Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish, Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

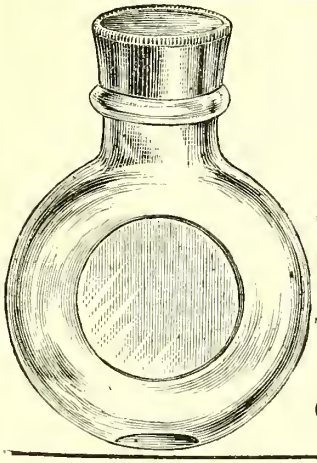
OAKEY'S WELLINGTON KNIFE POLISH,
Prepared expressly for Oakey's Patent Rubber Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines.
Sold in Canisters with perforated Tops to prevent waste, at 1*d.*, 2*d.*, 3*d.*, 6*d.*, 1*s.*, 2*s.* 6*d.*, and 4*s.* each.

OAKEY'S NON-MERCURIAL SILVERSMITH'S SOAP,
For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6*d.* each.

OAKEY'S "POLYBRILLIANT" (Registered).
A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes.
Tins 1*d.*, 2*d.*, 3*d.*, and 6*d.* each.

WELLINGTON BLOCK BLACK LEAD,
In 1*d.*, 2*d.*, and 4*d.* Blocks, and 1*s.* Boxes.

WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.E.
Highest award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1888. Gold Medal, Crystal Palace, 1884.



R. H. BARRETT,

Flint Glass Bottle Works,

THE OVAL, CAMBRIDGE HEATH, LONDON, E.

For Beauty, Cheapness, and Efficiency R. H. BARRETT'S

WATCH SMELLING-SALT BOTTLES

EXCEL ALL OTHERS IN THE MARKET.

The Caps are all fitted with **INDESTRUCTIBLE WASHERS,** to resist the action of Ammonia and retain the strength of the Salts.

Price, assorted white and coloured, 10/6 per gross (in 5-gross lots).

Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered

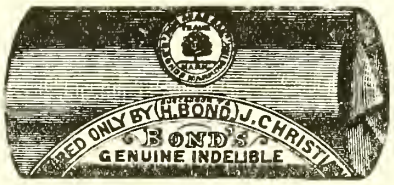
Telegraphic Address—"FOREFRONT LONDON." [1]

HENRY BOND'S ORIGINAL "OAK TREE" MARKING INK.

Warranted to remain fluid in all Climates. Produces a brilliant unfading Black.

This valuable invention of the late HENRY BOND claims a preference over all others of the kind in the freedom with which it can be used, **with or without the application of heat,** and never any fear of injury to the finest fabrics.

Every vendor can safely recommend this Brand without fear of complaint, either as to quality or quantity. With view to guard against spurious imitations, **write for Christian Bond's "Oak Tree" Brand.**



Facsimile of Wrapper.

Two injunctions have been granted to H. Bond's legal successors, restraining the use of the name, "H.Bond's Marking Ink," one as recently as Nov. 17, 1882, against F. J. Bond.

GENUINE

ESTABLISHED OVER 70 YEARS.

Ordinary Inks, in all convenient forms for Export and Counter Trade, 6*d.* and 1*s.* in blue wrapper, Red Trade Mark, boxed or carded, in 1 dozen each 6*d.* and 1*s.* Pedestal, with Stretcher, in ½ dozen and 1 dozen boxes; ½ oz. and 1 oz. Stoppered Bottles, in boxwood case, for the use of large establishments 2*s.* 6*d.* and 5*s.* each. Complete Illustrated Price List on application. Write for handsome Showcard, Handbills, and Specimen on Linen.

Liberal Discounts to Shippers and the Trade. Sample Bottle supplied gratis and sent post-free to any part of the World on receipt of Business Card.

To be obtained through all the leading Wholesale Houses in the United Kingdom.

Prepared only by J. CHRISTIAN, Sole Proprietor, 46 CITY ROAD, LONDON, E.C.

PATRONISED BY HER MAJESTY.

BARBER'S ORIGINAL

CRIMSON MARKING INK,

WHICH IS CHANGED BY HEAT TO A JET BLACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles.

ALSO

BARBER'S CONCENTRATED LIQUID COCHINEAL

FOR COLOURING JELLIES, CUSTARDS, ETC.

Put up in 6d. and 1s. Bottles.

MANUFACTURED ONLY BY THE PROPRIETORS—

G. BARBER & CO., CLUB MOOR, LIVERPOOL.

Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GRIMWADE & CO., Melbourne; ELLIOT BROS., Sydney and Brisbane; KEMPTHORNE, PROSSER & CO., Dunedin and Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufacturers—G. BARBER & CO., Club Moor, Liverpool, England.

AN ESTABLISHED NEW YORK COMMISSION AGENCY,

Representing well-known English Manufacturing Chemists, and now doing an extensive business with the Wholesale Drug Trade of America, can introduce Specialities to advantage. Correspondence solicited.

Address—FRANCIS J. MACNAUGHTAN, 20 Cedar Street, New York City, U.S.A.

REFERENCES—T. & H. SMITH & Co., 12 Worship Street, London; MAY & BAKER, Battersea, London ROBERT GRAESSER, Ruabon, Wales.

ESTABLISHED 1833.

HORSES.—LIEUT. JAMES'S BLISTER.

CAUTION.

The annexed Label is at the top of every Pot of the *ORIGINAL* and only *GENUINE BLISTER.*

The Messrs. Barclay & Sons, 95 Farringdon Street, London, and Messrs. Raimes & Co., Edinburgh, are now and have been Agents 55 years.

AGENTS:—Sutton & Co., 10 Bow Churchyard; W. Edwards & Son, 157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans, Lescher & Evans, Bartholomew Close; Burgoyne, Burbidges & Co., 16 Coleman Street; Lynch & Co., 171A Aldersgate Street; Southall Brothers and Barclay, Birmingham; R. Hovenden & Sons, 93 & 95 City Road, Finsbury; Sanger & Son, 150 Oxford Street; Millard & Sons, 40 Charterhouse Square; Corry & Soper, Shad Thames; A. A. Campbell, Leadenhall Street, London; Woolley, Sons & Co., 59 Market Street, Manchester; Apothecaries Company, Virginia St., Glasgow; John Thompson, 53 Hanover Street, Liverpool; Boileau & Co., Bride Street, Dublin; McMaster & Co., 121 & 122 Capel Street, Dublin; Clarke & McMullen, Victoria Street, Belfast; D. Galbraith, Londonderry; M. C. Delacre, Pharmacie Anglais, Bruxelles.

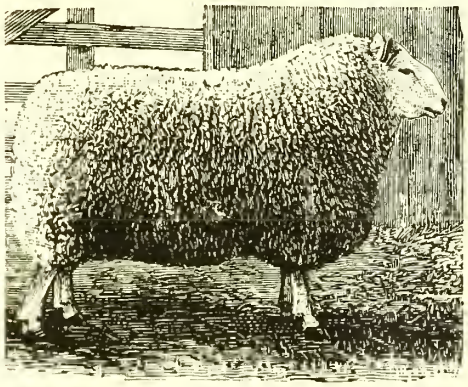
And by all Chemists, in Pots, 1/6, 2/9, 5/, 9/, *and* 16/.

COLONIAL AGENTS:—MELBOURNE and WELLINGTON: Felton, Grimwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Elliott Bros. & Co.; DUNEDIN and AUCKLAND: Kempthorne, Prosser & Co.; CALCUTTA: Smith, Stanistreet & Co.

W. H. JAMES, SOLE MANUFACTURER, STANFORD, FARINGDON, BERKS

Advertised in "Bell's Life" 54 years. Beware of Spurious Imitations.

QUIBELL'S SHEEP DIPS



AGENTS WANTED.

Write for Terms to

QUIBELL BROS. Newark-on-Trent.

REVOLUTION IN THE FLY PAPER TRADE.

It must have been observed that for some time the public have become disgusted with the old poisonous fly paper, and have taken somewhat readily to a sticky sort of substitute.

The advertiser has perfected and patented a Fly Paper of this nature, which will certainly be the leading thing in this way in the future. It is a well got-up and effective paper, and is as cleanly to handle as a sheet of note-paper.

In the advertiser's own retail establishment last season the sale of this was simply enormous, as they were freely used by tradespeople (butchers, bakers, grocers, and confectioners), who would not dare to risk the danger from dead poisoned flies about their stock. Owners of horses and cowkeepers were delighted with them as they spared the animals the torture from this source.

From the nature of the article it cannot very well be stocked by Wholesale Houses for distribution to the Retail Trade, but the Parcel Post will carry them direct from the maker, and Postal Orders will facilitate remittance.

The price is 4/6 per gross (carriage free), but where a large trade is developed more liberal terms will be given.

Send sample order for small lot, and while the season is on you are bound to do a big thing.

ADDRESS—

S. WILSON, CHEMIST, ST. HELENS, LANCS.

PINE'S DEVONSHIRE OILS

PRICE		
1 dozen,	13/6	Per doz. net in Wine Bottles.
3 „	12/6	
6 „	11/6	CARRIAGE PAID. Single Sample Bottle, 1/9.
12 „	10/6	

FOR HORSES, COWS, SHEEP, AND LAMBS.

THESE CATTLE OILS *are prepared from the Original and Valuable Recipe of* WILLIAM YOUATT PINE, and are *unsurpassed*, their great sale being a sufficient guarantee of their EXCELLENCE.

PREPARED AND SOLD WHOLESALE BY

WALTER GREGORY, 31 Fore Street, WELLINGTON, SOMERSET.

BATTLE'S VERMIN KILLER.

Mice eat it readily and Die on the spot.

TRADE MARK.

Has an immense Sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, eat it readily, tumble over, and die on the spot. Rats usually die in their runs.—Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

TESTIMONIALS.—*Thousands might be published.*

From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet.——From Mr. EDWARD STURDY, Flemington Mills.—I duly received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets.——Leeds, November 6th, 1857.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS S. CROSLAND.—Mr. Stead.

Sold in Packets, 3d., 6d., and 1s. each.

SOLE PROPRIETOR:

Mr. J. R. BATTLE, Chemist, Lincoln, England.

No Chemist or Storekeeper should be without a supply

GOVERNMENT DISINFECTANT

TRADE GOVERNMENT MARK DISINFECTANT

CARBOLIC POWDER (PINK) in 1 Cwt. 2 Cwt. CASKS 1lb & ½ Packages

CARBOLIC POWDER (PINK, in TINS 6d & 1/-

CARBOLIC FLUID in 6d 1/ & 1/6 STOPPERED BOTTLES

CARBOLIC SOAP No 1 & No 2

CARBOLIC & GLYCERINE SOAP in ¼lb TABS

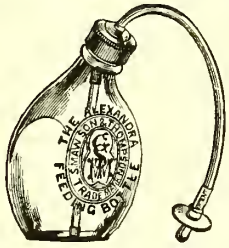
FREE FROM POISON AGREEABLE IN SMELL.

THE GOVERNMENT SANITARY Co., LONDON E.

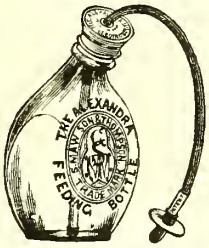
TO BE HAD FROM ALL WHOLESALE DRUGGISTS.

S. MAW, SON & THOMPSON'S

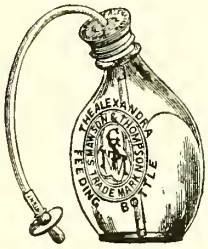
FEEDING BOTTLES.



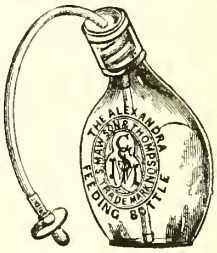
Alexandra Feeding Bottle,
Screw Metal or Earthenware Cap.
11/ per doz.



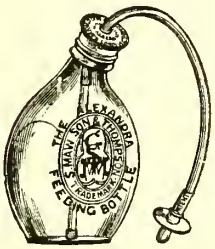
Alexandra Feeding Bottle,
Gilt Porcelain Cap.
20/ per doz.



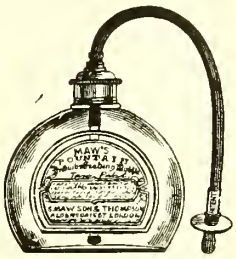
Alexandra Feeding Bottle,
Earthenware Cap.
11/ per doz.



Alexandra Feeding Bottle,
Screw Glass or Earthenware.
Stopper, **11/** per doz.

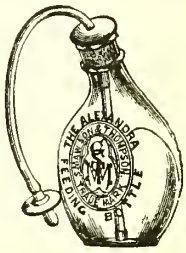


Alexandra Feeding Bottle,
Earthenware Cap.
8/ per doz.

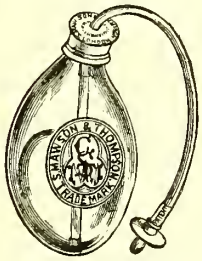


Fountain Feeding Bottle,
Screw Glass Stoppers.
20/ per doz.

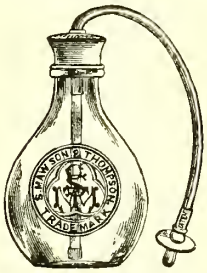
Fountain Feeding Bottle,
Screw Glass Stoppers.
12/6 per doz.



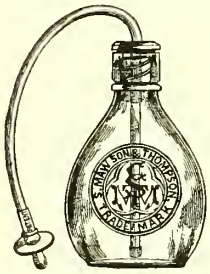
Alexandra Feeding Bottle,
Wood-Top Cork.
3/ and **3/8** per doz.



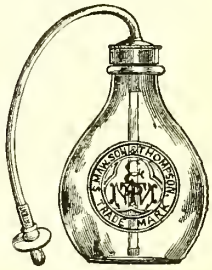
Oval Feeding Bottle,
Earthenware Cap.
8/ per doz.



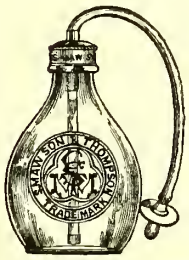
Export Feeding Bottle,
Earthenware Cap.
7/3 per doz.



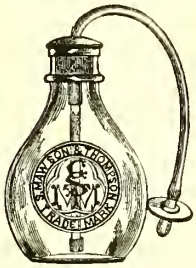
Export Feeding Bottle,
Screw Glass Stopper.
7/6 per doz.



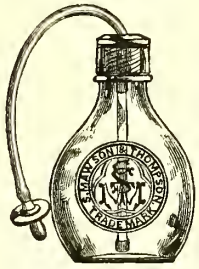
Export Feeding Bottle,
Screw Metal or Earthenware Cap.
9/ per doz.



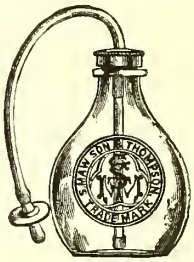
Export Feeding Bottle,
Metal Cap.
4/6 per doz.



Export Feeding Bottle,
Wood-Top Cork.
2/9 and **3/6** per doz.



Export Feeding Bottle,
Screw Glass Stopper.
4/ per doz.



Export Feeding Bottle,
Screw Metal Cap.
4/6 per doz.

FOR FURTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 46 AND 47.

[2] **SPECIAL QUOTATIONS TO WHOLESALE BUYERS.**

S. MAW, SON & THOMPSON, LONDON.

PURE

SPIRITS OF WINE.

60 o.p., 20/3 per gall.; 56 o.p., 19/9 per gall.

1/ per Gall. Discount for Cash with order.

Further allowance for quantity. *STEAM STILLS ONLY.*

GEORGE PHILLIPS & CO.,

ST. ANDREW'S DISTILLERY, CLERKENWELL RD.

LONDON, E.C.

W. H. B. REFINED
W. H. B. WHITE } **BEESWAX.**

Bernard Dyer, B.Sc. (Lond.), F.C.S., F.I.C., Analytical and Consulting Chemist. } LABORATORY, 17 Great Tower Street.

London, E.C., *Nov.* 25, 1886.

I have analysed a cake of Wax stamped W.H.B. sent to me by a London House on behalf of Messrs. W. H. Bowdlear & Co. of Boston, Mass., U.S.A. It consists of pure bleached beeswax unmixed with paraffine, fat, or other of the various materials with which beeswax, and especially white wax, is commonly adulterated.

Bernard Dyer, B.Sc., F.C.S., F.I.C., Member of the Society of Public Analysts.

Our goods may be obtained in single case lots of any of the leading Wholesale Druggists in the Northern and Midland Counties, and of LOFTHOUSE & SALTMER, Hull; COLTHURST & HARDING, Bristol; GOODALL, BACKHOUSE & Co., Leeds; GLASGOW APOTHECARIES COMPANY, Glasgow; OLDFIELD, PATTINSON & Co., Manchester.

We will deliver our Goods in 5-cwt. lots ex quay, in any City which is the Terminus of a Steamship Line throughout the Kingdom.

CABLE ADDRESS—"BOWDLEAR BOSTON."

W. H. BOWDLEAR & CO.,

147 Pearl Street, BOSTON, MASS., U.S.A.

BOORD & SON,

RECTIFYING DISTILLERS & WINE MERCHANTS,

ALLHALLOWS LANE and BARTHOLOMEW CLOSE, } LONDON, E.C.,

OFFER LOWEST QUOTATIONS, ON APPLICATION, FOR

FINEST RECTIFIED SPIRITS OF WINE

Methylated Spirit and Finish; Finest Orange Wine, Sherries, and Malagas for Medicated Wines.

ANILINE DYES

TO SUIT ALL TRADES.

BEST SPIRIT BLACK
IN THE MARKET.

Mahogany Stain
Ebony Stain
Oak Stain
Walnut Stain

PRONK, DAVIS & CO.

3 TRINITY PLACE, TOWER HILL, LONDON, E.C.

COLOURS.
CHEMICALS.
INDIGO PASTE.

CUDBEAR

DYEWOOD EXTRACTS.

BRONZE POWDERS AND METAL LEAF

BURROUGH'S Best Cale St. Distillery, Methylated Spirits CHELSEA, S.W. AT LOWEST PRICES.

also Best Miscible Naphtha FINEST WOOD NAPHTHA. JAMES BURROUGH, LONDON, S.W.

SILVER MEDAL I.H.E. 1884.

THE ONLY MEDAL AWARDED FOR THIS SPECIALITY

CHLORIDE OF LIME!

IN AIRTIGHT WATERPROOF & ODOURLESS PACKAGES

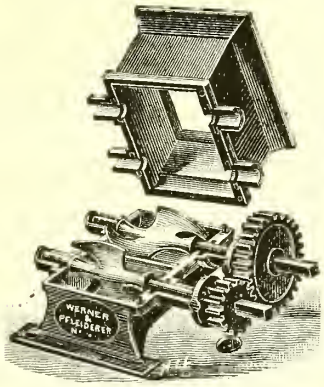
INVENTORS AND MANUFACTURERS **NATIONAL CHEMICAL Co., LONDON**

THE N. C. Cos. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS &c.
SEE THEIR PRICE LISTS

SILVER MEDAL I.H.E. 1884.

BEWARE OF OTHER SO-CALLED AIRTIGHT PACKAGES.



Size 3, Type I, for 1-lb. Mass.

THE "UNIVERSAL"

KNEADING AND MIXING MACHINE

FOR

PILL MASS MAKING,

ALSO FOR

Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing and Incorporating.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from ½ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 86 Upper Ground St., Blackfriars Bridge, LONDON, S.E.

THE ORIGINAL GENUINE

EAST INDIA OIL OF MUSTARD SEED

Is strongly recommended as a safe and effectual remedy in cases of

RHEUMATISM, GOUT, RHEUMATIC GOUT, SCIATICA, LUMBAGO, HEADACHE, PAINS IN THE STOMACH, SPASMS, BRUISES, CHILBLAINS, &c.

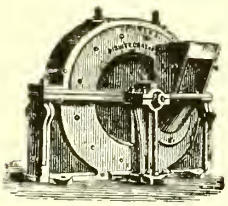
RETAIL IN BOTTLES, 1s. EACH.

Imported by J. H. & S. JOHNSON, Wholesale Druggists, 6, 8, and 10 WHITECHAPEL, LIVERPOOL.

Wholesale Agents: London—Newbery & Sons, and Bourne, Johnson & Latimer

CARTER'S DISINTEGRATORS

Will Pulverise, Granulate, or Shred almost any Mineral, Vegetable, or Animal Substance.



NEARLY 1,100 IN USE

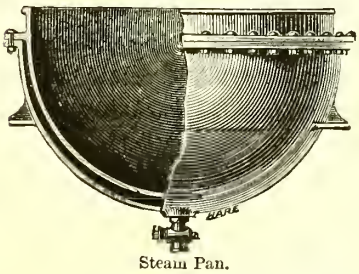
IN ALL PARTS OF THE WORLD.

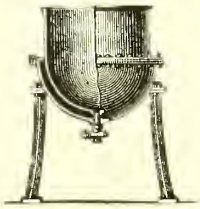
For Grinding Sugar, Bark, Linseed, Ginger, Pepper, Spices, Salt, &c., this Machine is invaluable. Made in 9 Sizes. Illustrated Catalogue may be obtained on application.

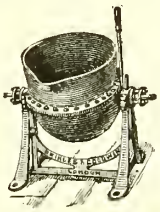
Samples of ANY Material will be Ground free of charge.

J. HARRISON CARTER, 82 MARK LANE, LONDON; and PARIS.

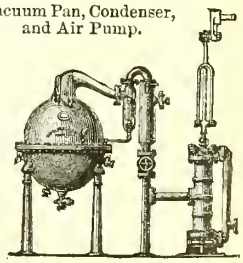
Telegraphic Address—Milling London.


Steam Pan.


Steam Pan.


Tilting Pan.

Vacuum Pan, Condenser, and Air Pump.



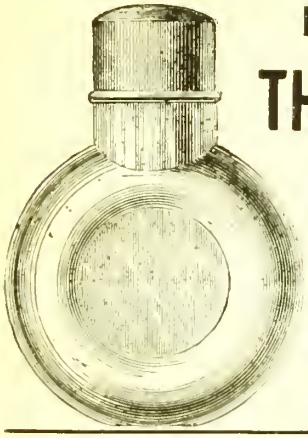
MANUFACTURERS

Crushing and Grinding Machinery.
Boiling and Evaporating Machinery.
Paint and White Lead Machinery.
Food Preserving Machinery.
Fruit Preserving Machinery.

BRINJES & GOODWIN,

FIELDGATE ST., LONDON, E.

ESTABLISHED 1829.



EXTRAORDINARY CHEAP LINE!!!

THE WATCH SMELLING-SALT BOTTLE

PLAIN OR FLUTED.

These Bottles are fitted with **BEST SCREW NICKEL CAPS**, lined with Washers, and are the most wonderful value ever offered. A trial order will prove this fact.

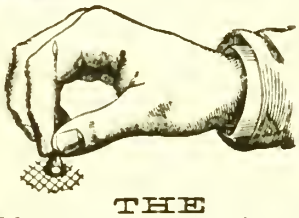
PRICE, IN BEST WHITE FLINT OR ASSORTED COLOURS, **12/-** PER GROSS, in not less than 1 gr. lots.

SPECIAL QUOTATIONS for Orders of FIVE GROSS and upwards.

E. A. HEARN & CO., Manufacturers of Glass Bottles of every description,

381-3 KINGSLAND ROAD, LONDON, E.

The annexed Illustration shows exact size of above-mentioned Bottle.

Trade Mark.  Registered.

THE

ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,

12 PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.

HUMAN VACCINE, from healthy children only, microscopically examined an source quoted. Tubes, two-thirds full, 1s. 3d. each; Tubes one-third full and Lancet-charged Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen Charged Small Points, 5s. Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccinations daily, between the hours of 12 and 2, by the Consulting Physician, at the uniform fee of a guinea. P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to

EDWARD DARKE, Secretary.

Office hours 10 to 4; Saturdays, 10 to 2.

DISPENSING BOTTLES & PHIALS

The following are our greatly Reduced Prices:—

CLEAR BLUE TINTED.

3 and 4 oz.	6/6 per gross.	12 oz.	11/6 per gross.
6 and 8 oz.	7/6 „	16 oz.	15/6 „

WHITE MOULDED PHIALS.

LONG OR SQUAT SERIES.

½ oz.	3/0 per gross.	1½ oz.	4/3 per gross
1 oz.	3/6 „	2 oz.	4/9 „

Prompt attention to country orders. Packages 1/ each, allowed for if returned. Sample bottle sent free on application.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS.

25 Francis St., Tottenham Court Road, London, W.C.

Established upwards of 70 years. *Bankers, London and Westminster*

Savaresse's Capsules.

SAVARS

CUBEB CIGARETTES.

SAVARS CUBEB CIGARETTES.

Cubebs, Stramonium, and Cannabis Ind. (soothing) Relief in Asthma, Throat Cough, Bronchitis, Influenza A specific against Fogs.

Boxes (12) 1s., 9s. per doz., (36) 2s. 6d., 24s. per doz.

Full Directions.

EVANS, SONS & CO., LIVERPOOL.

EVANS, LESCHER & WEBB LONDON.

SAVARESSE'S CAPSULES. SANDAL WOOD; COPAIBA.

Savaresse's Capsules of membrane, each containing 15 drops Pure Maranham Copaiba Balsam, or, also of membrane, each containing 10 drops Purest Yellow Sandal Wood Oil. The efficacy of these valuable medicines is due to the absolute purity of the Balsam or Oil, and to the very gradual solvability of the membrane as compared with gelatine.

Copaiba, 2s. 6d., 18s. doz. Sandal, 4s. 6d., 36s. doz.

EVANS, LESCHER & WEBB, LONDON.

EVANS, SONS & CO., LIVERPOOL.

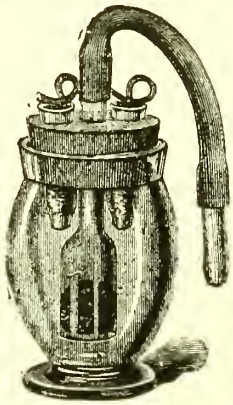
50

GODFREY'S

NEW PATENT

CHLORIDE OF AMMONIUM

CATARRHAL THROAT AND EAR AFFECTIONS.



LOSS of VOICE, BRONCHIAL ASTHMA AND HAY FEVER.

INHALER

YIELDS a plentiful cloud of **Neutral Vapour** with little effort on the part of the patient.

Illustrated Prospectus, with the "History of Chloride of Ammonium as a remedial agent," free by post.

Price 7/6 *Retail.*

SHIPPERS AND LARGE BUYERS SUPPLIED ON LIBERAL TERMS.

SOLE MAKERS—

GODFREY & COOKE,

30, CONDUIT STREET, BOND STREET, W.

WILLIAM TOOGOOD'S
SPECIALITIES.

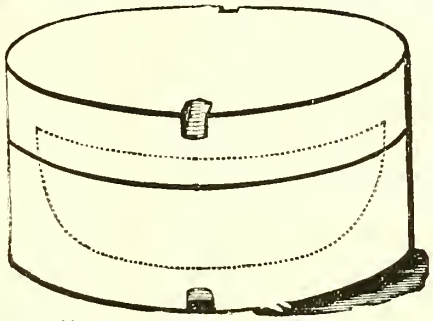
WAREHOUSE AND SHOW ROOM,
BURLINGTON BUILDINGS,
HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S

IMPROVED PATENT

EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	½	¾	1	1½	2	3	4	6	8 ounces.
1/6	1/6	1/6	1/7	1/8	1/10	2/2	2/10	3/4	4/6	5/6 per doz.

THIN for DISPENSING—

½	¾	1	1½	2	3	4	6	8 ounces.
1/7	1/8	1/10	2/-	2/4	3/-	3/8	5/-	6/- per doz.

TOOGOOD'S
BURNT-IN POTS,
FOR COLD CREAM, TOOTH PASTE, &c.

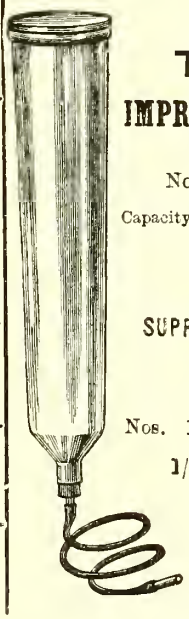
TOOGOOD'S
GRADUATED MEASURES.

TOOGOOD'S
BOXWOOD-TOP CORK BOTTLES

TOOGOOD'S
MEXICAN SQUARES.

TOOGOOD'S
CORN-SOLVENT BOTTLE.

TOOGOOD'S
POISON BOTTLES.



TOOGOOD'S
IMPROVED PERCOLATORS.

Nos.	1	2	3	4	5
Capacity	12	25	66	100	160 ozs.
	2/	3/	4/6	6/	7/ each

SUPPORTS FOR ABOVE IN STAINED WOOD.

Nos.	1	2	3	4	5
	1/9	2/	3/	3/	3/6 each.

NORMAN'S
PATENT PILL COATER

The cheapest and most efficient machine yet introduced, combining simplicity with portability, and enabling small quantities of pills to be coated with the same facility as large.

It speedily saves its own cost.

Price 3/6 each.

AUSTRALIAN AGENCY AND SAMPLE ROOM:
Mr. A. I. JOSEPH, 250 Pitt Street, Sydney.

Telegraphic Address: "TOOGOOD LONDON."
Telephone No. 3834.

William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.

IMPORTANT.

ROYAL BALSAMIC PLAISTERS

PREPARED BY W. MATHER.

CAUTION TO THE TRADE.

The Commissioners of Inland Revenue having instituted Proceedings against several Chemists owing to certain Handbills accompanying the sale of Royal Balsamic Plaisters, such Handbills being regarded as asserting a Proprietary Right contrary to Act of Parliament, retailers are respectfully solicited to examine all packages of Plaisters they may have in stock, and

Destroy all Handbills Issued Prior to this Notice

that have reference to Royal Balsamic Plaisters. As all future Handbills will bear the date of issue at the bottom, it will be understood that all Handbills as have no date thereon must not be used. It is hoped that retailers will render assistance to prevent further proceedings by their compliance with the terms of this notice. It may be observed that the Stamp on the back of the Plaisters is in accordance with the Provisions of the Act of Parliament.

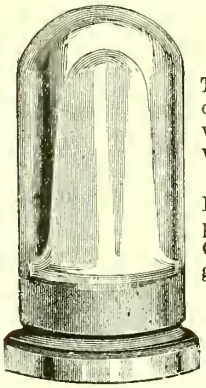
W. MATHER,

DYER STREET, HULME, MANCHESTER, ENGLAND.

PRICE LISTS SENT ON APPLICATION.

London Wholesale and Export Agents: Messrs. MACE & HALDANE, 77 Milton Street, London, E.C.

SHIRLEY'S A1 BRAND MENTHOL.



QUITE NEW.

The Menthol is fixed on a **China** Stopper, which is covered with a glass shade; always clean.

Buyer's own name printed round the China if order is given for a large quantity.

	Doz.
Style 26A. 6*d.* size..	3/6
Style 27A. 1*s.* size ..	6/3

GOOD SELLING PATTERNS.

No.	Description.	Price per doz s.	d.
1	6*d.* Glass Bottles with Metal Screw Cap	3	3
1B	6*d.* Blue Ditto Ditto Ditto ..	3	4
9A	1*s.* or 1/6 Boxwood, Skittle-shaped	7	6
9C	1/6 or 2*s.* Do. Do.	9	6
9S	6*d.* or 9*d.*, good value, Do.	4	0
17L	1*s.* Draughtsman Shape, Boxwood only, extra large	6	6
17S	6*d.* Ditto Boxwood	4	0
19	6*d.* Boxwood, Egg Shape, on elegant Card	3	0
21A	1*s.* Menthol on Boxwood stopper, covered with glass shade, very attractive, 12 in a box	6	3
23A	6*d.* Ditto Ditto 12 in a box.....	3	6
24	6*d.* Boxwood, Bottle Shape, very attractive.....	3	6

A Dummy Cone, 9 inches high, given free with all orders of 20s., or two if 30s. order is placed.

SPECIAL PRICES to LARGE BUYERS.

BOUND TO SELL.

Menthol in Boxwood, with views of London on one side of the case, beautifully painted—St. Paul's Cathedral, Westminster Abbey, Windsor Castle, Tower of London, Westminster Bridge, Houses of Parliament. This is

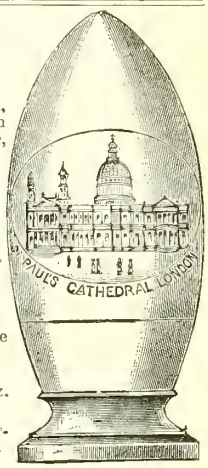
A NOVELTY

and adds greatly to the value.

No extra is charged.

11A. 6*d.* .. 3/6 per doz.
14A. 1*s.* .. 6/3 „

Please state Views required when ordering.



Chemist's own name printed on back of the boxes without extra charge, provided a gross is ordered. This opportunity of advertising yourself and increasing your trade should not be lost.

ORDER AS A1 BRAND.

SHIRLEY'S 2nd QUALITY, PUT UP FOR THOSE WHO WANT CHEAP GOODS.

	Per Dozen	Per Gross
2*d.* No. 100.—Polished Willow Box	1/5 ...	13/
3*d.* „ 101.—Willow Acorn	1/10 ...	17/
3½*d.* „ 102.—Boxwood Pedestal	2/4 ...	24/
4*d.* No. 103.—Boxwood Pedestal (large)	2/9 ...	27/
4*d.* „ 104.— „ Barrel shape ...	2/9 ...	27/
6*d.* „ 105.— „ Button shape ...	3/4 ...	34/

These prices are net, and the boxes have not the printed directions on them.

DON'T MAKE A MISTAKE!!!

The following Sell Well and bear a Good Profit:—

EAU DE COLOGNE

In flat watch-shape Bottles, with Nickel Cap.

Each Bottle is neatly labelled, and contains an ounce of best quality Perfume.

A GOOD SELLING LINE.

4s. per doz., 12 in a Box.

FULLER'S EARTH

Attractively put up in cardboard boxes, with label (3 colours).

Can be had either White Precipitated, as preferred by many, or ordinary Prepared Fuller's earth.

Price, 3s. per dozen.

Special terms for large quantities.

Order as A1 Brand.

TOOTH SOAP,

WHITE ROSE.

Nicely got up in a hinged patent Box (Jahncke's), neatly labelled.

The Soap itself is highly scented and fragrant.

4s. per dozen.

FUMIGATING RIBBON.

Elegantly put up in round blue and gold Boxes.

Indispensable to the Sick Room, as, after being lit a few minutes, a vapour ascends perfuming the whole room.

3s. 6d. per dozen.

A Show Stand given away with an order for 3 dozen, together with two yards of Ribbon to practically show its perfume.

SMELLING SALTS.

The best Bottle of the Season: it has a good base, and stands well; is attractively labelled, and enclosed in a hinged outer. Filled with strongest ammonia, and agreeably perfumed.

Price, 2s. per dozen, 20s. per gross.

Special quotations for 5 or 10 gross lots.

A similar Bottle, only stoppered, 4*s.* per dozen. 43*s.* per gross.

LOOFAH GLOVES, SOCKS, & BATH BELTS.

(Special Agent for Elste's Patent.)

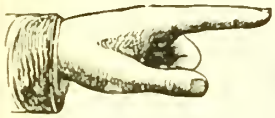
JUST THE THING FOR THE SUMMER.

LOOFAH SOCKS, wide and narrow	6/	per dozen pairs
„ GLOVES, Loofah and White Turco, or Double Loofah	6/6	per single dozen
„ „ Loofah and Coloured Turco ..	7/	„
„ BELTS, Loofah and White Turco, or Double Loofah.....	13/6	„
„ „ Loofah and Coloured Turco....	14/6	„

ARTHUR W. SHIRLEY, 30 Paternoster Square, LONDON, E.C.

HORN & SON.
OFFICES FOR BRITISH AND FOREIGN
PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).
Guide to New Patent Law and Registration gratis.

FRED^K FINK & CO.,
10 & 11 MINCING LANE, LONDON, E.C.
SPECIALITIES: Glycerine—Gum Arabic—Gum Tragacanth—Pure Beeswax—Honey—Vanilloes.


ARMBRECHT'S
COCA WINE.
AGENTS APPOINTED.
2 DUKE ST., GROSVENOR SQUARE.

RUBBER TYPE

On Metal body, perfectly accurate, for instantly making a RUBBER STAMP for Special Labels, &c., saving expense and delay. Complete Outfits from 7/6. Send for Specimens and Price List to the Patentee,
E. M. RICHFORD, Dept. C. 44 Snow Hill, London,
Manufacturer of Rubber Stamps, Presses, the "Nigropadd" and "Effective" Self-Inking Pads, &c., and Stamp-making Outfits.
Chemists in all parts of the world can add largely to their profits by pushing our Goods. Liberal terms.

HOOPING COUGH! HOOPING COUGH!! HOOPING COUGH!!!
Positively and quickly cured by the New Discovery,
KEMP'S WHOOPALINE
(TRADE MARK.)
Is a certain cure in all cases of Hooping Cough, Bronchial Disorders, and all affections of the Chest and Lungs. Price 1/1½ and 2/9 per bottle.
Prepared only by
W. H. KEMP, 220 Holloway Road, LONDON,
Wholesale Agents:—
Messrs. BURGOYNE, BURBIDGES & Co., 16 Coleman Street, London, E.C.

GIVEN AWAY!
YOUR MONOGRAM or NAME.
Anyone sending 3d. for postage, &c., and mentioning this advertisement, will receive gratis his Two-Letter Monogram in above style, or his name in full, for Marking Linen or Paper. Great variety of Stamps. Specimens free.
VAN HOUTEN & CO., Stereotypers in Indiarubber,
21 COLEMAN STREET, LONDON, E.C.
Houten.

CARMEL.
This Castile Soap is manufactured at Mount Carmel, Palestine, from pure Olive Oil pressed on the spot. As an emollient for the skin and complexion it is the most ancient and best soap.
AGENTS WANTED IN EVERY TOWN.
DEPOT FOR GREAT BRITAIN AND COLONIES—
MOUNT CARMEL SOAP CO., 24 Charles Street, Hatton Garden, LONDON, E.C.

ORANGE WINE
(VIN. AURANT., P.B.)
Specially brewed for Quinine Wine, does not deposit. Is well adapted for Export, as it will keep good in any climate. In casks, 13, 27, 56, 112, 140 gallons; small casks 3s. 9d. per gall., carriage allowed. In wine bottles (not less than 3 doz.), at 9s. per doz., including bottles. Cases extra and returnable.
Sample six stamps. Special quotations to large buyers.
GEO. DURRANT & CO., Hertford.

PRECIPITATED CHALK, WHITEST AND PUREST.
CHEAPEST SELLERS IN THE MARKET.
ALSO CHEMICALS, DRUGS AND OILS.
APPLY TO
AUG. LEVERMORE & CO.,
8 LIME STREET LONDON, E.C.

GEORGE HAYNES & CO.
Hampstead Cotton Mills, Cherry Tree Lane, Stockport,
MANUFACTURERS OF
BLEACHED AND ABSORBENT WOOLS,
Grey Wool, Coloured Wools, and Jewellers' Sheets.
WHOLESALE AND EXPORT ONLY.
Telegraphic Address—"HAYNES STOCKPORT."

LINT.

THE
LIVERPOOL PATENT LINT CO.
MARK STREET MILLS,
NETHERFIELD ROAD NORTH,
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HONEY-DROP—FOR THE SKIN
Retail—6d., 10d., 1/6, and 3/-
This splendid preparation, which is selling immensely, can be had wholesale from
W. EDWARDS & SON, LONDON; EVANS, GADD & CO., EXETER
Special Terms for Agencies. Enquiries solicited.
Sole Proprietor and Manufacturer,
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ANALYTICAL AND CONSULTING CHEMIST.
GEO. LOGAN RAIT, F.C.S., &c.
Laboratory—31 MOORGATE ST., LONDON, E.C.
Assistance given to Manufacturers and others requiring Chemical knowledge.
Fifty per cent. discount allowed to the Trade.

GLOY FOR LABELLING, &c.
Cheaper, cleaner, and more adhesive than gum, paste, or dextrine. Never decomposes in any climate.
Price 12s. per cwt., equal in solution to 3d. per gallon.
Agents wanted. Gold Medals and numerous Testimonials.
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AMBROSIA FOOD FOR INVALIDS MACLEAN'S
Established 1818.
An EXQUISITE (PATENT) combination of MACLEAN'S REVALENTA FOOD, with Finest New (Special Preparation) OAT FARINA, in 2s. and 1s. packets.
MACLEAN, Food Specialist and Patentee, EDINBURGH.
Agents wanted in leading towns, home and abroad.

GENUINE AND RELIABLE
HOMŒOPATHIC MEDICINES
1s. size Tinctures or Pilules, 3s. 9d. per doz. net cash.
J. J. WATTS & CO., Wholesale Homœopathic Chemists, Manchester.

KERNICK'S
LIME JUICE CORDIAL
(SWEET OR DRY),
FRUIT SYRUPS ETC.
LIST FREE.
KERNICK & SON, CARDIFF.

S. SAINSBURY'S
A Highly-perfumed Scent, prepared from the finest ENGLISH LAVENDER, without any foreign whatever.
176 & 177 STRAND, LONDON.
Wholesale and Shipping terms on application.
Lavender Water.

TO LET.

CARBOLIC POWDER
IN BAGS, CASKS, OR CANISTERS.
5%, 10%, 15%, and 30%.
EITHER PINK OR WHITE.
SAMPLES AND PRICES ON APPLICATION. [2]
GRINDLEY & CO., POPLAR, LONDON, E.

IMPROVED SYRINGES
FOR THE
INJECTION OF GLYCERINE
TO RELIEVE CONSTIPATION.

PRICES TO THE TRADE—
PEWTER, 8/ per dozen; PEWTER, with Glass Barrel, 12/ per dozen; VULCANITE, 30/ per dozen; VULCANITE, with Glass Barrel, 30/ per doz.; CELLULOID, with Glass Barrel, 42/ per doz.
S. MAW, SON & THOMPSON, ALDERSGATE ST., LONDON.

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DAHL'S DYSPEPSIA CAKES.
PANIS DIETETICUS.
NATURAL REMEDY FOR INDIGESTION AND CONSTIPATION.
Recommended by several leading Medical Men. 2/6. 1/ boxes.
No more Castor Oil! Special Brand for Children! The Children's Bread! Price 2/- per box.
For Terms apply to Wholesale Houses.
DAHL'S AGENCY:—41 EASTCHEAP, LONDON.

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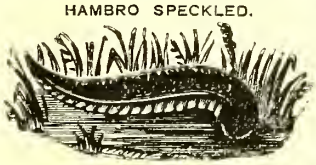
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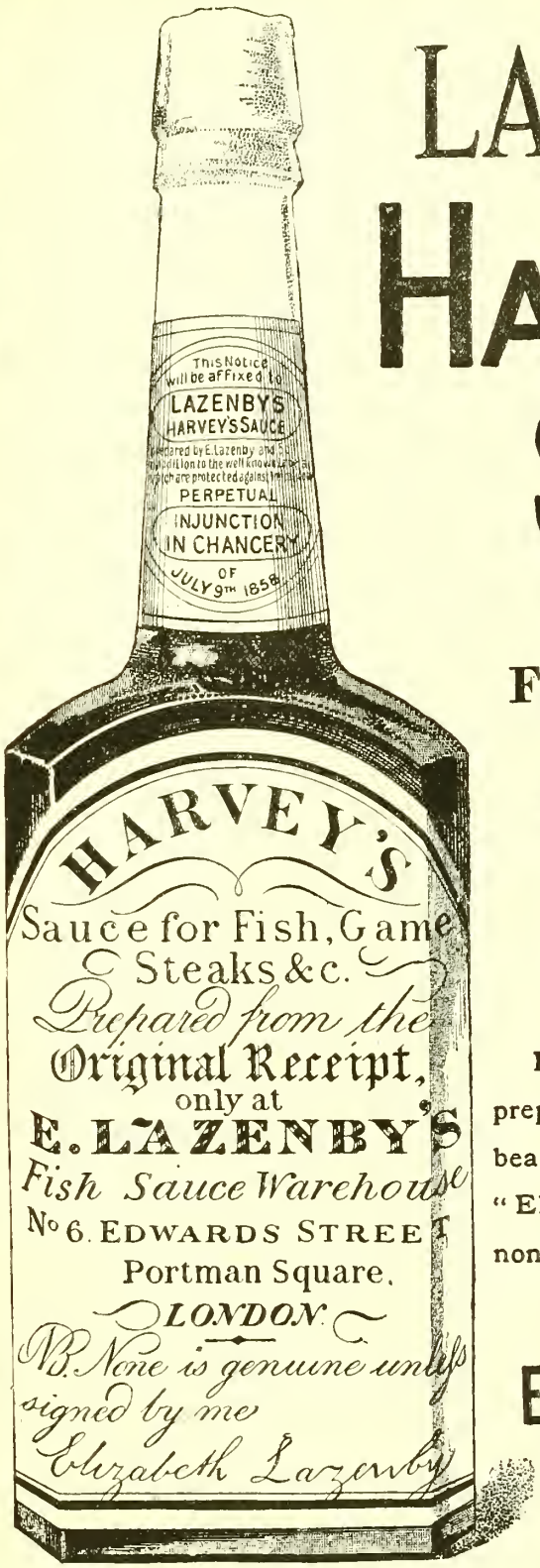
LEECHES!
Warranted Healthy. Wholesale and for Exportation. Direct from Marshes.
FITCH & NOTTINGHAM,
LEECH BREEDERS,
4 CANONBURY SQUARE, LONDON, N.
All Orders by Post receive immediate attention.

GENERAL ACCIDENT BUSINESS
AGENTS WANTED.
Chemists and Druggists invited
TO APPLY TO
EMPLOYERS' LIABILITY ASSURANCE CORPORATION, LIMITED,
84-5 King William Street, London, E.C.

CIRCULARS, PRICE LISTS, &c., TO THE TRADE.

Firms who are desirous of issuing Circulars to 11,000 buyers of Drugs, Druggists' Sundries, &c., should take advantage of the July 28 Issue of THE CHEMIST AND DRUGGIST.

FOR TERMS APPLY EARLY TO
THE PUBLISHER, at the OFFICE, 42 CANNON STREET, E.C.



LAZENBY'S

HARVEY'S SAUCE

FOR

FISH, GAME, STEAKS, &c.

In use for now nearly a century.

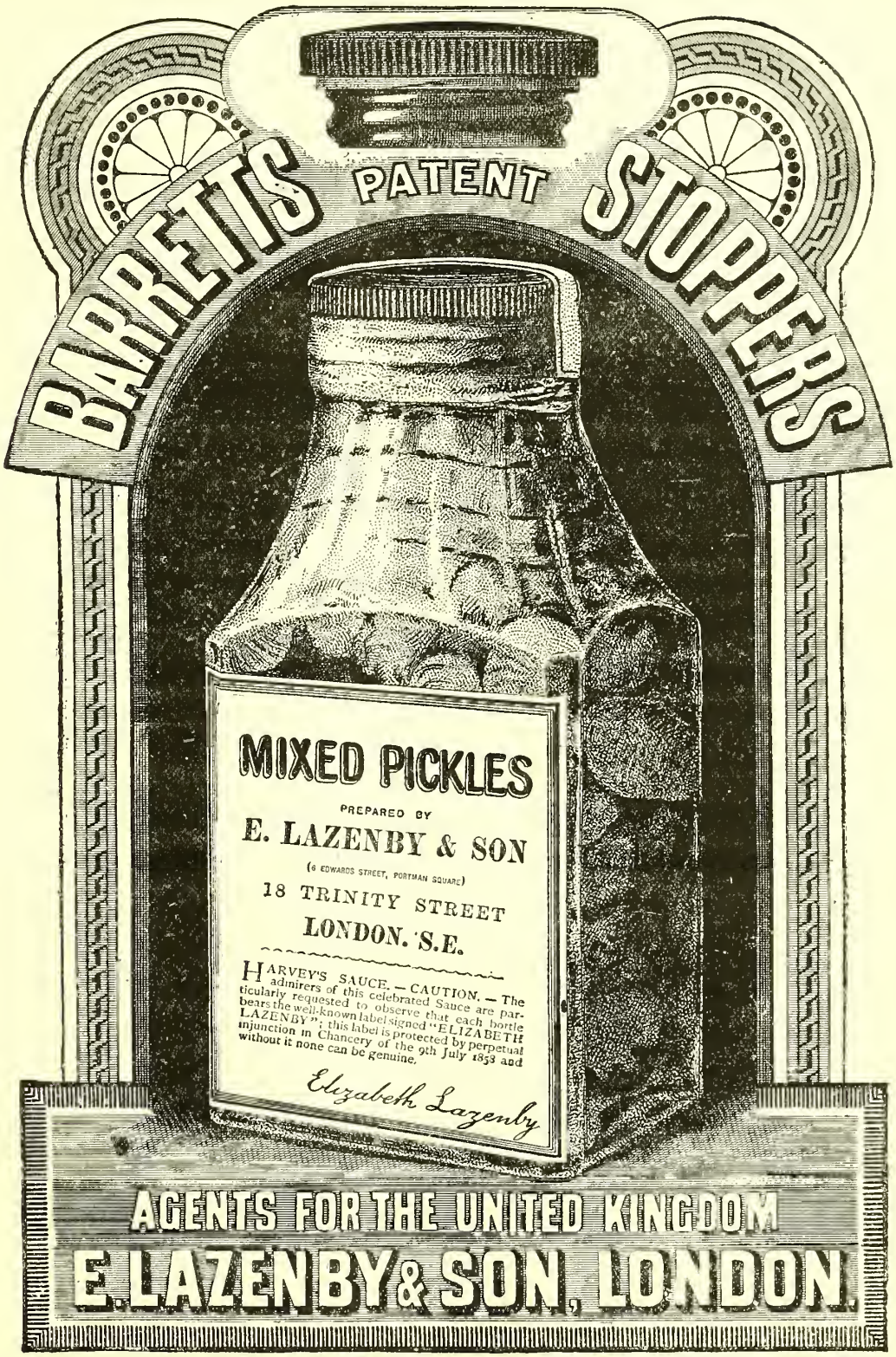
CAUTION.

Each bottle of the celebrated Sauce prepared from the ORIGINAL RECIPE bears the well-known Label signed "Elizabeth Lazenby," without which none can be genuine.

E. LAZENBY & SON,

18 Trinity Street,

LONDON. S.E.


BARRETTS PATENT STOPPERS
MIXED PICKLES
PREPARED BY
E. LAZENBY & SON
(6 EDWARDS STREET, PORTMAN SQUARE)
18 TRINITY STREET
LONDON. S.E.
HARVEY'S SAUCE. — CAUTION. — The admirers of this celebrated Sauce are particularly requested to observe that each bottle bears the well-known label signed "ELIZABETH LAZENBY"; this label is protected by perpetual injunction in Chancery of the 9th July 1853 and without it none can be genuine.
Elizabeth Lazenby
AGENTS FOR THE UNITED KINGDOM
E. LAZENBY & SON, LONDON.

A WARNING.

1 London House Yard, London, E.C., March 20, 1888.

I beg to call especial attention to the case referred to below. In that action the Plaintiff's Manager swore, and his affidavit was in no way disputed, that—

KEATING'S INSECT DESTROYING POWDER

is quite harmless to animals and human beings, and that it does not contain any substance that is poisonous to either.

I take this opportunity of again stating that "Keating's Powder" is a special preparation, different from, and not to be compared with, any so-called Insect Powders which give so much dissatisfaction to customers.

My Trade Mark, registered October 11, 1876, is—

KEATING'S

PERSIAN

INSECT DESTROYING POWDER.

Any one infringing this I shall at once proceed against, as such a step is as much an injury to the whole trade as myself.

THOMAS KEATING.

In the High Court of Justice.

CHANCERY DIVISION.

MR. JUSTICE NORTH.

26th October, 1886.

KEATING *v.* POLL.

IT WAS ORDERED:

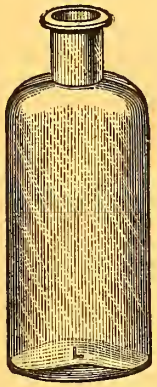
That the Defendant be perpetually restrained from stating or causing to be stated that Keating's Persian Insect Destroying Powder contains **any substance poisonous to animals or human beings,** or from making any statement to the effect that such Powder is dangerous to animals or human beings.

IT WAS FURTHER ORDERED:

That the Defendant, William Sheppard Poll, do pay to the Plaintiffs their costs of this Action.

NOTICE.—***Chemists who make statements to customers defamatory of Keating's Insect Powder will be summarily proceeded against.***

DISPENSING BOTTLES



QUININE TINTED.

"L" BRAND.

Warranted Finest Quality Metal, Good Mouths, and Correct Measure.

CATALOGUE No. 42a. In any quantity from Stock.

FLATS OR OVALS.

Size ...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross	9/-	9/6	10/-	10/6	10/6	11/6	11/6	16/-	17/-	21/-	25/-	27/6	36/-	40/-

Discount : 10 per cent. Monthly, 5 per cent. Half-yearly.

ALSO

IN ORIGINAL PACKAGES DIRECT FROM WORKS.

Carriage paid to Bristol, Glasgow, Liverpool, or London.

"L" BRAND. CATALOGUE No. 42a.

Size ...	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross	7/6	8/-	8/-	8/6	8/6	9/6	9/6	12/6	13/6	16/6	20/-	22/-	29/-	33/-

BEST GREEN FLINT FLATS OR OVALS.

CATALOGUE No. 42.

Size ...	½ oz.	1 oz.	1½ oz.	2 oz.	3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.	40 oz.
Per Gross	6/-	6/-	6/-	6/-	6/8	6/8	7/9	7/9	10/6	11/6	15/-	19/-	22/-	27/6	32/-

STRICTLY NET CASH.

CASKS OR CRATES EXTRA.

LYNCH & CO., ALDERSGATE STREET, LONDON, E.C.

AND

48 QUEEN STREET, MELBOURNE.

SOLE IMPORTERS

OF

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FRIEDRICHSHALL WATER,
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THE APOLLINARIS CO., LIM.

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The medical profession order Cadbury's Cocoa Essence in thousands of cases, as the most wholesome beverage. Be sure you get it when asked for, as imitations are often pushed for the sake of extra profit.

"We have carefully examined the samples brought under our notice, and find that they are genuine, and that the Essence of Cocoa is just what it is declared to be by Messrs. Cadbury Brothers."—*Lancet.*

"Cocoa treated thus will, we expect, prove to be one of the most nutritious, digestible, and restorative of drinks."—*British Medical Journal.*

GUARANTEED PURE AND SOLUBLE.

EASY TEETHING.

DO NOT LET YOUR CHILD DIE!

Fennings' Children's Powders Prevent Convulsions; are Cooling and Soothing.

FENNINGS' CHILDREN'S POWDERS,

For Children Cutting their Teeth, to Prevent Convulsions.

Sold in Stamped Boxes, at 1*s.* 1½*d.* and 2*s.* 9*d.* (great saving), with full Directions.

Do not contain Calomel, Opium, Morphia, nor anything injurious to a tender babe.

Chemists, by applying to the Patent Medicine Houses and Wholesale Chemists, can obtain, free of any charge, a supply of "FENNINGS' EVERY MOTHER'S BOOK," for Counter distribution.

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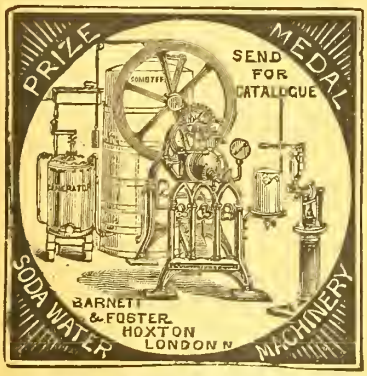
SODA WATER MACHINERY

And all Appliances for the Manufacture of all Aerated Drinks in the highest state of perfection.



PRIZE MEDALS—London, 1862, 1873, 1874; Paris, 1867, 1878; Vienna, Philadelphia, Cape, &c. HIGHEST AWARD—Sydney, 1879-80.

FIRST-CLASS CERTIFICATES & 4 PRIZE MEDALS, CALCUTTA, 1883-84.

THREE GOLD, TWO SILVER, & TWO BRONZE MEDALS, INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884. 5 FIRST ORDERS OF MERIT, ADELAIDE, 1887.

Our Machines are universally adopted throughout the world for the manufacture of all kinds of Aërated Drinks, whether in bottles, syphons, or counter fountains. There are in England alone over 2,000 factories where our Machinery is in use, besides many thousands in India and the Colonies. They are the simplest, safest, and cheapest for the purpose, and produce a highly-charged gaseous water free from metallic or foreign contamination. All our Machines have a Gasometer, and it forms a most important necessity where purity of product is required, as in this the gas is expanded and purified; it also removes the possibility of accidents by explosion, and avoids the necessity of complication—these we consider of greater importance than the saving of a few inches of floor space.

A complete Soda Water Plant, including Bottling Machine, for producing 100 dozen Lemonade, Ginger Beer, Ale, &c., per day, is supplied for £40.

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26T Eagle Wharf Road, New North Road, London, N.

Printed by SPOTTISWOODE & Co., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—*July* 14, 1888.

A copy of this Supplement is inserted in every number issued of "THE CHEMIST AND DRUGGIST."

THE CHEMIST & DRUGGIST
SUPPLEMENT.

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, JULY 14, 1888.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 16 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & CO.

OFFICES: 42 CANNON ST., LONDON, E.C.

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CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

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1.—**£700.—LONDON, N.E.**—Large handsome Pharmacy for immediate disposal; returns, under management, about £700; can easily be doubled by a good man; large attractive house and shop; very convenient; price £600, or offer.

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3.—**£800.—LONDON, S.W.**—Handsome lock-up Pharmacy; largely specialities; well suited for a branch; returns nearly £800 yearly; *net profits* over £300; full particulars on application.

4.—**£600.—LONDON, W.C.**—Dispensing and Retail for sale under exceptional circumstances; returns at present nearly £600 yearly; can be largely extended; good stock; well-fitted shop; rent low; offer wanted.

5.—**£750.—WORCESTERSHIRE.**—Homœopathic and Dispensing business; established 7 years; returns nearly £750; *good profits*; has ten rooms with private entrance, well suited for letting; full particulars on application; illness cause of sale; valuation of stock and fixtures only required.

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9.—**£1,600.—SOUTH OF ENGLAND.**—Fashionable watering-place; good-class Retail and Family Business; returns average over £1,600 yearly, with *good profits*; large handsomely-fitted shop, and good stock; full particulars on receipt of reference.

10.—**£450.—WILTS.**—Good-class Retail and Dispensing Business; situate in a market town; returns £450 yearly (a young man could do much more); large house, with cellars and store-room; double-fronted shop, in best position; large garden; price, to include goodwill and lease, £400.

11.—**£4,000.—PROVINCIAL TOWN.**—Home county; Mixed Wholesale and Retail; returns from profitable business nearly £4,000; large and convenient premises, well suited to the business; terms, small premium and valuation; good introduction will be given.

12.—**£500.—SUSSEX.**—Fashionable watering-place; good-class Retail and Dispensing; returns at present, under manager, about £500; can be much improved by principal; good house; rent low; price £300.

13.—**£664.—HERTFORDSHIRE.**—Unopposed country Business, of good class; returns last year £664; well-fitted shop and good stock; house contains 8 rooms and shop; rent £23 yearly, on lease; price £350; part may remain; anyone with £200 cash will be treated with.

14.—**£300.—LANCASHIRE.**—Small Branch Retail and Dispensing and Prescribing; capable of great extension; returns at present nearly £300 yearly; well-fitted shop and good stock; price £170.

15.—**£400.—WILTS.**—Good market town; small country Retail and Dispensing; capable of great increase; returns at present about £400 yearly, with *good profits*; large well-fitted shop and good stock; price £225.

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3.	STAFFORDSHIRE	„	1,200.	„	60.	„ 1,150
4.	LIVERPOOL	„	850.	„	50.	„ 700
5.	DURHAM COUNTY	„	1,650.	„	75.	„ 1,100
6.	CHESHIRE	„	1,300.	„	55.	„ 700
7.	LEYTONSTONE...	„	240.	„	40.	„ 225
8.	LONDON, N.....	„	400.	„	45.	„ 187
9.	CLAPHAM.....	„	400.	„	40.	„ 200
10.	HAMMERSMITH	„	240.	„	40.	„ 180
11.	NOTTINGHAM ..	„	400.	„	25.	„ 200
12.	WEST BROMWICH	„	400.	„	50.	„ 250
13.	HANLEY	„	360.	„	30.	„ 250

Some of above, newly established, increasing rapidly.

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3s. 6d. for fifty words; 6d. for every 10 words beyond.

SHOP, suitable for a Chemist and Druggist; main road; moderate rent. Particulars from H. T. Waterman, Estate Offices, Walham Green Station, Fulham Road.

TO Chemists, &c.—Do not lose splendid opportunity in fashionable N.W. suburb; would suit a beginner or branch business; for £40 per annum only, to Let, large Double-fronted Shop, with seven other good rooms, side entrance, yard, &c.; undergoing redecoration. Address, "Residence," care of G. Bindon, Springfield Road, Harrow-on-the-Hill.

BUSINESSES WANTED.

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CITY, or West End.—Good-class Retail, Prescribing, and Dispensing; moderate price; cash; send full particulars as to business done, length of lease, and if trial allowed. M. A. P., 35 Gray's Inn Road, W.C.

A BUSINESS; must be genuine; in a good country town preferred, and South of England, or an increasing London suburb; returns from £700 to £1,000. Send full particulars to Mr. Blacklock, Pharmacist, 74 Railton Road, Herne Hill, S.E.

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PARTNERSHIP.—Wholesale.—Gentleman with £3 000, prepared to take an active part in the business, wanted; references to be exchanged as preliminary. Messrs. Orridge & Co., 32 Ludgate Hill, E.C.

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£400.—A Retail and Prescribing Business; established by vendor 14 years; comfortable house and garden; commanding a large neighbourhood; rent £42. Apply by letter, or personally from 2 to 4 or 6 to 8, Mr. Gill, 56 Grayshott Road, Lavender Hill, S.W. No Agents.

TO BE SOLD OR LET, at once, an old-established Chemist and Druggist Business (through the death of proprietor); sound, good business; fine opening for energetic man; situated in an improving town. Apply, Gravett & Son, or Hy. Jarrett, New Romney.

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LONDON, S.W.—Genuine old-established Business; main road; returns over £600 cash; capable of great increase; strict investigation courted; good house and garden; valuable specialities; ill-health and retirement from the trade cause of sale. Apply by letter, A. B., Messrs. Hill, 101 Southwark Street, S.E.

SUFFOLK.—Unopposed Family Retail and Prescribing Business, returning about £750, at full prices; net profit £300; rent £30; nice house and ¼ acre of walled-in garden, fruit trees, &c.; price £550; cause of sale illness; strictest investigation allowed. Apply to "Suffolk," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESS for disposal, within easy access of London; good-class Family Retail, Dispensing, and Prescribing Business; corner shop, main thoroughfare; good house on long lease; net profits £340; price £3 0; to *bonâ-fide* purchasers full particulars; no agents. Apply by letter to "Iridis," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON, W.—A Branch; important thoroughfare; no opposition; mahogany and mirror fitted; splendidly stocked; established 12 months; last two months £18 and £19; very profitable; Prescribing and Retail; plenty of room for development; rent £50, let off £30; price £150. M., Mr. Johnston, Messrs. Ronald, 3 Little Love Lane, Wood Street, E.C.

WEST OF ENGLAND.—Good-class Dispensing Business; well-fitted and commanding shop; good house, on lease; net profits over £500; price £1,350. Particulars forwarded on receipt of reference to wholesale house; no agents. G. G. C., care of Evans & Lescher, 60 Bartholomew Close, London.

WANTED immediately, Apothecary or Chemist and Druggist or Medical Practitioner, fully and legally qualified to take over going Business in prosperous manufacturing town; terms exceptionally easy, but must have from £100 to £200 cash, and be able to come at once. Address, "Spes," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SOMERSETSHIRE.—Old-established, unopposed Country Business, 9 miles from Bristol; Light Retail and Prescribing; present profits over £100, easily doubled by addition of other branches; rent and taxes under £20; immediate possession for less than one year's profits; good saleable stock worth the money. Medical Hall, Nailsea.

FOR disposal, the Dundalk Medical Hall; established over 60 years; most imposing plate-glass front; modern fixtures and fittings; long lease; low rent; excellent opening for a steady man and dentistry; satisfactory reasons given. For particulars, apply to Mulvany, Dundalk, Ireland.

LEICESTER.—Branch; main road; established 2 years; capable, under personal supervision, of great extension; thousands of people pass the shop daily; to a young man commencing business this is an opportunity rarely met with; a good prescribing and tooth-extracting business could be done; rent and rates £26; price £150. Apply, W. Rowe, 82 Granby Street, Leicester.

FOR immediate sale, an old-established and good-class country Business in a healthy, beautiful, and aristocratic neighbourhood; satisfactory reasons for sale; returns £600; profits about 45 per cent.; premises very good; valuation for stock and fixtures; half or one-third cash, the balance may remain at interest. Apply, M. P. S., care of Rev. J. Smith, 8 Brunswick Street, Leeds.

A GENUINE good-class Dispensing and Family Business, in or near London, S.E. or S.W.; must return not less than £500 or £600, and be capable of improvement; house must be either a corner one or have private entrance, and, at least, a small garden attached. Address, with full particulars and lowest price, to Tenax, care of Messrs. Baldock & Co., South Norwood, London, S.E.

YORKSHIRE.—A Chemist's Business, with Wine and Spirit Licence attached, for disposal; is pleasantly situated in one of the principal thoroughfares of a large manufacturing town in the above county; returns about £1,000; could be considerably increased; owner going abroad on account of bad health; would take valuation of stock and fixtures. For further particulars, apply B. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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APPRENTICE wanted, by Chemist in Bath; good opportunity for getting a general knowledge of the trade; premium £40; indoors. Apply, E. White, Kingsmead Square, Bath.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

IMPROVER; well-educated and gentlemanly; state age, references, &c. W. Giffard Lenfestey, Herne Bay.

JUNIOR Assistant; indoors; state age, full particulars, reference, and salary. Thomas Kenny, Chemist, 236 Beverley Road, Hull.

WANTED.—Experienced Pill Maker and Coater. Apply to Lorimer & Co., Britannia Row, Islington, London, N.

IMMEDIATELY; Assistant, good address, and accustomed to first-class business. Full particulars to W. Giffard Lenfestey, Herne Bay.

WANTED, a Junior for Light Retail and Dispensing. Send photo. and full particulars to W. L., 34 High Street, Putney.

WANTED, a young man to manage Drug business; one seeking a permanency, with view to succession. State terms, &c., to Dr. Garth, Preston.

COUNTERMAN wanted; outdoors; experience of cutting trade preferred; good references. State age, salary, references, &c., to Mr. W. Inman, 8 Shandwick Place, Edinburgh.

JUNIOR (indoors), first week in August; chiefly for branch; close early one day a week; good reference required; state age, salary, class of trade used to, when disengaged. James Shilton, Walsall.

LEDGER Clerk, accustomed to the Wholesale Drug Trade. App'y, with full particulars, to G., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST.—Manager wanted; qualified; aged 25; married; able to extract teeth and prescribe; East end business. Full particulars to C. G., Messrs. Shaw's, 403 Oxford Street, W.

DENTAL Pupil required by a Dentist doing a large practice; premium required; progressive salary; must be well educated and gentlemanly. "Dentist," care of Mr. Rothwell, 30 Lime Street, London.

JUNIOR Assistant; about 25; Scotchman; for a vacancy in China; give full particulars of previous experience. State if qualified, and how soon able to start, to J222, care of Messrs. Deacons, Leadenhall St., E.C.

DISPENSER and Counter Assistant, aged about 24 (Minor), for a new Branch, situate in a high class neighbourhood. Apply, stating age, height, qualification, references, and enclose *C.D.V.*, S. Wand, Chemist, London Road, Leicester.

MITRE TEA.—Messrs. Kearley & Tonge, sole proprietors of the Mitre Tea, are prepared to negotiate in confidence with gentlemen having a business connection amongst good chemists. Apply by letter only, Kearley & Tonge, Tea Merchants, Mitre Square, Aldgate, E.C.

TRAVELLER - Cave, Johnson & Co., 8 Lime Street, E.C., are open to make a liberal arrangement with gentlemen taking towns and villages, calling upon Chemists, to open up Agencies for the sale of the celebrated "Spring Blossom Ceylon Tea"; only one sample required.

ASSISTANT; indoors; in suburb of Liverpool; good dispenser and reliable; state age, height, salary required, and enclose carte (to be returned); applications not answered in 3 days declined. Robert P. Roe, 97 Green Lane, Stoneycroft, Liverpool.

J. C POTTAGE, Homœopathic Chemist, 117 Princes Street, Edinburgh, is in want of an active qualified Assistant (outdoors); a knowledge of homœopathy is not essential; good prospects to a suitable party; state salary, experience, and enclose photo.

PORTER wanted.—Strong Youth; aged about 17 years; to live in; state by letter age, salary, reference, experience, stating what kind of work been used to; enclose carte if convenient. R. Calvert, Chemist, Stokesley.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

ASSISTANT; Qualified; Store trade; outdoors; 24. 33 Great Western Street, Wednesbury.

TEMPORARY; 1 or 2 days weekly; good references. G., 100 Dalling Road, Hammersmith.

ASSISTANT and Apprentice; £50 (brothers). H. Davy Yates, 64 Park Street, Southwark.

REGISTERED Chemist; 50, active; Manager, or otherwise. 29 Upper High Street, Wednesbury.

OUTDOORS; aged 31; Country preferred; references. "Beta," 161 Brixton Hill, London, S.W.

WHOLESALE Wet or Dry Counter; 16 years' experience; first-class reference. J. A. C., 63 Wharf Road, Grantham.

LOCUM-TENENS Assistant; aged 22; good references and experience. B, 137 St. George's Road, Southwark, S.E.

MANAGER or Dispenser; Surgeon's or Chemist; temporary or permanent. T. Dunkerly, M.P.S., 83 Morton Road, Islington, N.

ASSISTANT, outdoor, or Branch; married; aged 30; experienced; town or country; salary moderate. Ford, 222 Albany Road, S.E.

ADVERTISER requires good Assistantship; country town preferred; height, 5 ft. 10 ins. J. A., Mrs. Galloway, 52 Dalry Road, Edinburgh.

ASSISTANT; 27 last August; disengaged about the 27th. J. R. Roadnight, 11 La Motte Street, Jersey.

AS JUNIOR in good-class business; aged 19; extract teeth, &c.; good references. P. H., Mr. Routly, Chemist, Eastbourne.

TO Manage a Branch, or as an Assistant, and extract teeth, &c.; qualified. Apply, A. D. Thompson, 75 Nottingham Street, Sheffield.

JUNIOR Assistant; 6 years' experience; in or outdoors; salary secondary. G. Lee, Crich, Derby.

OUTDOOR Junior Assistant; 8 years' experience; aged 23; height 5 ft. 6 in. J. W., Field House, Manordeilo P.O., South Wales.

LOCUM-TENENS or Permanency; good Prescriber and Counterman; town experience; aged 28; disengaged. B., 183 Church Road, Islington, N.

ASSISTANT, Branch Manager, or Surgeon's Dispenser; good prescriber; 13 years experience; married; unquestionable references; disengaged; moderate salary. W. M., 20 Prince's Street, Landport, Hants.

SHORTLY, to manage Branch (small house attached); married; good prescriber and teeth extractor. "Chemicus," 42 Fairbank Road, Bradford, Yorks.

JUNIOR or Improver, aged 21; can extract teeth; knowledge of vulcanite dentistry. "Chemist," 28 Welbeck Street, Chorlton-on-Medlock, Manchester.

MR SMITH, 4 Lodge Street, Bristol, Registered Chemist, Manager during absence, illness, or branch previous to disposal; distance immaterial.

TRAVELLER.—Large connection amongst Chemists and Stores, both London and country; first-class references. Address, X. Y. Z., May's, 159 Piccadilly.

AS Assistant; good Prescriber; London or Country; first-class references; aged 28; indoors preferred. S., 5 Lewis Villas, Carshalton Road, Sutton, Surrey.

AS Manager for Branch; aged 29; last situation two years; knowledge of Dentistry; good Extracter, Prescriber, Dispenser; qualified by experience. "Rhei," 211 Great Dover Street, E.C.

MANAGER; thoroughly competent; qualified; good Prescriber and Dispenser; would work up business; town or country; married; good references. P. C., Smith's Library, East Finchley, London, N.

TO Wholesale Druggists.—The Advertiser, calling upon Retail Chemists and Druggists and Medical men, in London and suburbs, is open to represent any good London firm, on commission or otherwise; good references and experience. W. G., 131 Kirkwood Road, Peckham, S.E.

LOCUM-TENENS.—Mr. J. Hall Roberts, qualified Chemist (formerly of Harrow), is prepared to accept engagements on reasonable terms as above for ensuing season in town or country; a convinced abstainer from alcoholic beverages. Kindly enclose stamp for reply to Holbein House, Folkestone.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

WANTED, Agency for sale of Specialities for Invalids by Chemist in a rising watering-place, frequented by good-class patients suffering from rheumatism, gout, tumours, skin diseases, &c. Full particulars to E. P. Carlton, Chemist, Horncastle, and at Woodhall Spa.

CH. DELACRE & CO., Brussels, Wholesale Chemists and Sundriesmen, are always pleased to enter into negotiations with any British or American firm who wish to push their Specialities in Belgium or Holland; travellers kept.

BOXES.—Light Wood Boxes, cheapest, strongest, and best, suitable for packing all kinds of articles for transmission by post or rail; all sorts and sizes of boxes made to order; samples and price-lists, 4 stamps. Write for sample, stating size required, to T. Casbon, Millfield Box Works, Peterborough.

READY next week, Fifth Edition, 24mo, in limp roan, 7*s.* 6*d.*, the Extra Pharmacopœia, with the Additions introduced into the British Pharmacopœia, 1885, and Medical References, and a Therapeutic Index of Diseases and Symptoms. By William Martindale, F.C S., and W. Wynn Westcott, M.B. Lond. London: H. K. Lewis, 136 Gower Street, W.C.

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A LARGE COPPER-PRODUCER FROM PYRITES is introducing a NEW MECHANICAL ROASTER, and ready to make arrangements with a manufacturer of acid or of fertilisers for the utilisation of the fumes on the premises (being in New England and near the market for fertilisers) under conditions exceedingly favourable to the manufacturer. Further particulars can be obtained from the Copperfield Mining and Smelting Company, Post Office, West Fairlee, Vermont, U.S.A.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

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PRELIMINARY.—Arithmetic and Metric System, 1*s.* How to Write an Essay, 3*d.* Cæsar Simplified, 1*s.* Knotty Points in Latin Grammar, 1*s.* 6*d.* MINOR.—Equations Simplified, 1*s.* Illegible Autographic Prescriptions, 1*s.* Notes on Dispensing, 1*s.* Prescriptions given at the Minor, 6*d.* "Chemist," care of Mr. J. Edwards, Wye, Kent.

GEO. STIRLING'S BOOKS FOR STUDENTS.

A Table of Organic Materia Medica.—A *concise* guide to the animal and vegetable substances of the British Pharmacopœia, and also to many non-official drugs in common use. Bound in stiff cloth, post free, 1*s.* 7*d.*

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Doses of B.P. 1885.—Compactly arranged for vest pocket. Post free, 6*d.*

GOWER, Publisher, 47 Sigdon Road, Dalston Lane, London.

In the High Court of Justice—Chancery Division.

MR. JUSTICE NORTH.

In the matter of the Companies Acts, 1862, 1867, and 1877,

and

In the matter of the General Apothecaries' Company, Limited and Reduced.

NOTICE is hereby given that a petition, presented to Her Majesty's High Court of Justice, Chancery Division, on the 8th day of June, 1888, for confirming a resolution reducing the capital of the above company, is directed to be heard before the Honourable Mr. Justice North, on the 21st day of July, 1888, and any creditor of the said company desirous of objecting to the proposed reduction of the capital of the company should appear at the time of hearing by himself or his counsel for that purpose, and a copy of the petition will be furnished to any creditor of the said company requiring the same, by the undersigned, on payment of the regulated charge for the same.

The form of minute proposed to be registered is as follows:—The capital of the General Apothecaries Company, Limited and Reduced, is from henceforth £25,306, divided into 1,000 Preference shares of £4 each, on each of which the sum of £4 has been, and is to be deemed, paid up; and 3,694 Ordinary shares of £4 each, on which (except one share, upon which the sum of £2 has been, and is to be deemed, paid) the sum of £4 per share has been, and is to be deemed, paid up; and 1,306 unissued Ordinary shares of £5 each, instead of the original capital of £30,000, divided into 1,000 Preference shares of £5 each, and 5,000 Ordinary shares of £5 each.

Dated this 4th day of July, 1888.

SNELL, SON & GREENIP,
1 and 2 George Street, Mansion House, E.C.,
Solicitors for the said company.

OUR WEEKLY SUPPLEMENT.

We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, Exchange column, &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.

OFFICES: 42 CANNON STREET, LONDON, E.C.